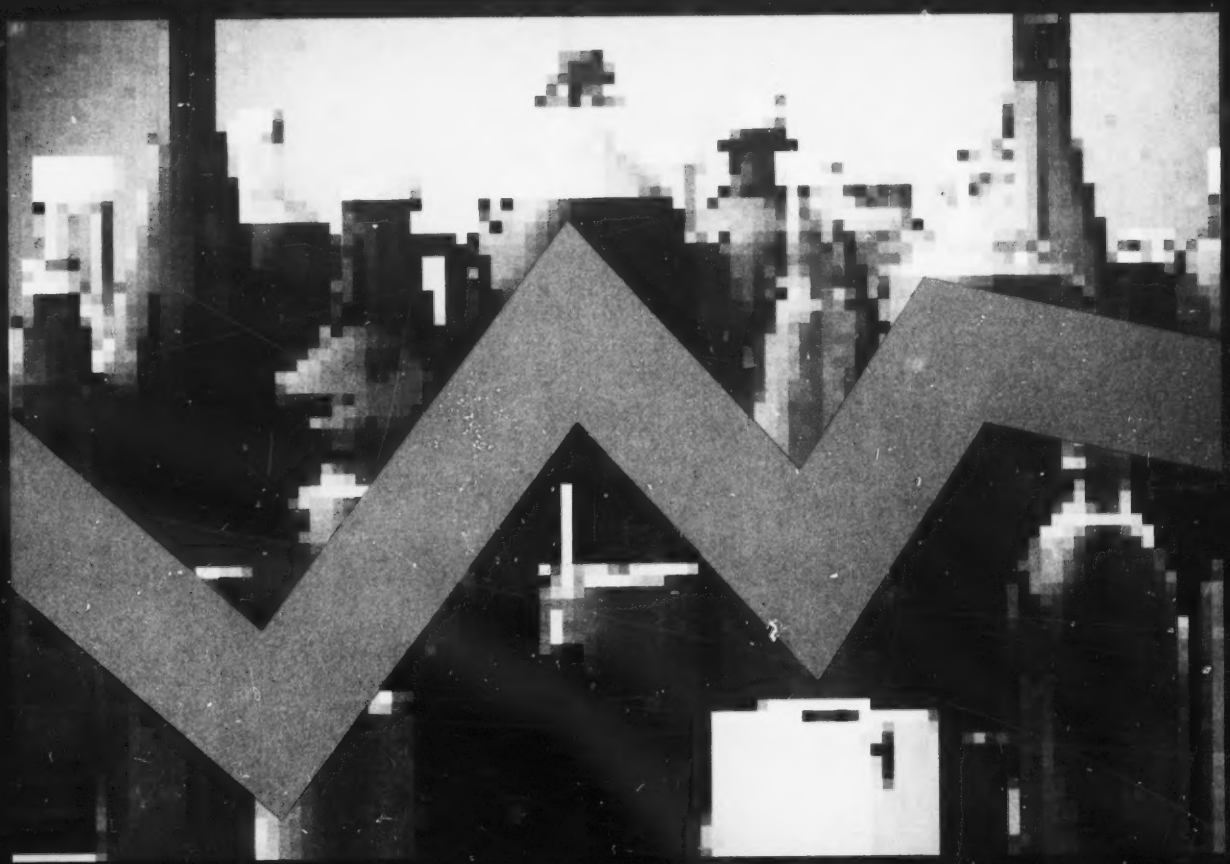
C4390-1 (L)

Beverage Industry ANNUAL MANUAL

AN HBJ PUBLICATION

$45.00



'84

WILLIAM R. DOLAN
Publisher
THOMAS H. BACHMANN
Associate Publisher
PAUL E. MULLINS
Editor
JESSIE MEYERS
Executive Publisher/Editorial

Editorial
Holly Klokis, Managing Editor
Gary A. Hemphill, Associate Editor
Laura Martinez, Assistant Editor
Marty Westerman, Contributing Editor
Caroline Foster, Graphic Designer
John C. Maxwell, Director of Research/Statistics, Lehman Brothers Kuhn Loeb Research
Michael Bellas, Research Director, Beverage Data Bank
Dan Moskovitz, Technical Editor
Thomas J. Bartlett, Truck/Distribution Editor
Ben Miyares, Executive Editor

Business
Bryn McCornack, Eastern Advertising Representative
Geoffrey C. Welch, Midwest Sales Representative
Shirley Swanson, Circulation Supervisor
Carol Halverson, Tammy Glaps, Directory Coordinators
Linda Winick, Promotion Manager
Gail Kessler, Reader Service Manager
Dawn Anderson, Classified Ad Manager
West Coast: Karl Keeler, Jr.
Keeler & Associates
915 Stewarton Way
Glendale, CA 91207
(213) 500-0693
Europe: Deirdre Wakefield
HBJ Publications
24-28 Oval Road
London NW1 7DX England
Tel: 01-267-4466
or 01-485-7074/5
Telex: 25775
Japan: Sankichi Yamasaki
Yamasaki International
4-16 Shiba 3 chome
Minato Ku
Tokyo 105, Japan
Tel: 03-454-5501
Telex: J29248 Cable: Yamaromassence

Production
Debi Harmer, Production Manager
Bonnie Ling, Production Supervisor

Main Office
7500 Old Oak Boulevard
Cleveland, OH 44130
(216) 243-8100

Offices
757 Third Avenue, New York, NY 10017
(212) 888-2956
Telex: 620408

111 East Wacker Drive, Chicago, IL 60601
(312) 938-2300

1 East First Street, Duluth, MN 55802
(218) 727-8511

California: (213) 500-0693

HARCOURT BRACE JOVANOVICH PUBLICATIONS: Robert L. Edgell, Chairman; Richard Moeller, President; Lars Fladmark, Executive Vice President; Arland Hirman, Treasurer, Senior Vice President; Thomas Greney, Ezra Pincus, Group Vice Presidents; Pat O'Rourke, Vice Presidents; Joe Bilderbach, James Gherna, George Glenn, Harry Ramaley, Don Gussow

BEVERAGE INDUSTRY (ISSN-0148-6187) is published monthly by Magazines For Industry, Inc., a subsidiary of Harcourt Brace Jovanovich Publications. Corporate and Editorial offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Advertising offices: 757 Third Avenue, New York, New York 10017 and 111 East Wacker Drive, Chicago, Illinois 60601. Accounting, Advertising Production and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: $35 per year in the United States; $45 per year in Canada. All other countries: $70 per year. Single copies (prepaid only): $2 in the U.S.; elsewhere $6.00; add $3.00 for shipping and handling per order. Copyright 1983 by Magazines For Industry, Inc., a subsidiary of Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Beverage Industry ANNUAL MANUAL

1. ANNUAL STATISTICS

Beverage consumption trends 11
Soft drink sales trends 23
Beer sales 43
Beer imports 51
Primary packaging 53
Secondary packaging 67
Equipment 71
Juice and juice drink trends 79
Sweeteners 81
Bottled water 89
Trucks/distribution 93
Bulk sales/vending 99
Powdered drink market 107
Recycling & mandatory deposit laws 111
Distilled spirits/wine 120

2. NEW PRODUCTS, SERVICES, LITERATURE 122-146

BI's Annual Manual in four parts

1. **Annual**—This section contains a review of what happened in the major segments of the beverage industry during the year. It includes charts and graphs detailing size of the industries, volumes, advertising expenditures, etc.

2. **New Products, Services, Literature**—This section details both new product marketing developments and the introduction of new equipment and services for the trade.

3. **Manual**—In charts and graphs, this material is operational in nature and gives the bottler production and formulation details available nowhere else. A directory of industry associations, franchise companies and brand names is also offered.

4. **Buyers' Guide**—Here the reader finds the industry's most complete directory of products and services. Complete addresses with telephone numbers of major suppliers are also given.

ADM CORN SWEETENERS

Distribution Terminals

Alabama
Birmingham
(205) 595-8636
Bay Minette
(205) 328-4805
Arizona
Phoenix
(415) 638-8502
California
Alameda
(415) 638-8502
Glendale
(213) 247-6300
Colorado
Commerce
(612) 371-3449
Florida
Orlando
(404) 874-7172
Georgia
Atlanta
(404) 874-7172
Illinois
Chicago
(312) 771-2990
Decatur
(319) 398-0600
Iowa
Cedar Rapids
(319) 398-0600
Clinton
(319) 398-0600
Louisiana
New Orleans
(504) 522-4176
Maryland
Baltimore
(609) 235-9000
Massachusetts
E. Cambridge
(609) 235-9000
Michigan
W. Bloomfield
(609) 235-9000
Minnesota
Minneapolis
(612) 371-3449
Missouri
Kansas City
(612) 371-3449
St. Louis
(312) 771-2990
New Jersey
Elizabeth
(609) 235-9000
New Mexico
Clovis
(504) 522-4176
New York
Brooklyn
(609) 235-9000
Lakeville
(716) 346-2311
Montizuma
(716) 346-2311
North Carolina
Charlotte
(404) 875-0571
Oklahoma
Okmulgee
(504) 522-4176
Oregon
Portland
(415) 692-3434
Tennessee
Knoxville
(615) 824-8634
Memphis
(504) 522-4176
Texas
Dallas
(504) 522-4176
Houston
(504) 522-4176
San Antonio
(504) 522-4176
Utah
Salt Lake City
(415) 638-8502
Virginia
Petersburg
(609) 235-9000
Washington
Tacoma
(415) 638-8502
Yakima
(415) 638-8502
Wisconsin
Neenah
(414) 463-9900
Watertown
(414) 463-9900

Circle No. 103 on Reader Service Card

3. MANUAL OF OPERATIONS

Specifications for producing flavor beverages **148**
Syrup usage per container and case **149**
Liquid sugar dilution chart **150**
Carbon dioxide consumption guide **150**
Flavor syrup costs **152**
Carbon dioxide required at various temperatures **154**
Calculating simple syrup costs **156**
Converting granular sugar to syrup **156**
Controlling microbial growth by pinpointing problem areas **158**
Installing a corn sweetener system **160**
Conversion from medium invert to 42% HFCS **161**
Blends of medium invert and 42% HFCS **161**
Conversion from medium invert to 55% HFCS **162**
Blends of medium invert and 55% HFCS **162**
Trouble-shooting guide **163**
Refractometer determination of solids in sucrose solutions **167**
Refractometer correction for HFCS 55, 0.05% ASH (d.b.) **168**
Manual directory section
National Soft Drink Association 169
NSDA executive board 170
State soft drink associations 171
Brewer & Beverage Packaging Association officials 174
State supplymen's associations 175
Allied beverage and food associations 175
Canadian associations 179
Foreign beverage associations 180
USBA officials 182
Major U.S. breweries 183
National Beer Wholesalers Association 187
State beer associations 188
State wine and liquor associations 190
Leading importers/distributors of imported beers 192
Brand names of leading beers and soft drinks 194
Franchise company directory **197**
Franchise bottler associations **202**
U.S. manufacturers representatives **203**

4. COMPREHENSIVE BUYER'S GUIDE

Index to categories **212**
Alphabetical listing of suppliers **216**
Product categories **244**

Beverage Industry ANNUAL MANUAL

ANNUAL STATISTICS

Beverage consumption trends 11
Soft drink sales trends 23
Beer sales 43
Beer imports 51
Primary packaging 53
Secondary packaging 67
Equipment 71
Juice and juice drink trends 79
Sweeteners 81
Bottled water 89
Trucks/distribution 93
Bulk sales/vending 99
Powdered drink market 107
Recycling & mandatory deposit laws 111
Distilled spirits/wine 120

Only water, soft drinks show per capita increase

The 1982 recession and decrease in consumer spending has finally showed an impact on beverage consumption in the U.S.

Preliminary per capita consumption figures for 1982 indicate that only soft drinks and bottled water showed any gains during a period considered the worst recession in this country since 1974.

According to **Beverage Industry's** Director of Research/ Statistics, John Maxwell, the weak economy also prompted purchasers to drink more inputed (tap) water for the first time since 1974.

The increases experienced by soft drinks and bottled and tap water came at the expense of coffee, beer, milk, juice, tea and distilled spirits. Powdered beverages and wine remained flat.

While per capita consumption of soft drinks increased from 39.5 gallons to 40.1 gallons, Maxwell noted that the majority of the increase came at the beginning of the year with the second half of '82 and the first quarter of '83 being flat. This trend, however, was expected to reverse itself as the economy strengthens and as the soft drink industry continues to introduce new brands.

market leaders

It appears that both diet and caffeine-free soft drinks will continue to be the leading growth area in the market.

The diet segment is approaching 15% of the market and new caffeine-free brands are hitting the market with some success.

Dr Pepper added a version of Pepper Free with sugar to go with its no-sugar version while Coke introduced caffeine-free brands. Others can't be far off. Consequently, the industry expected some growth reflected in '83's figures, according to Maxwell.

LIQUID CONSUMPTION IN THE U.S. 1982
(GALLONS PER CAPITA)

Soft drinks	40.1 (up .6)	Powdered drinks	(n.c)
Coffee	26.1 (down .6)	Wine	2.3 (n.c.)
Beer	24.4 (down .2)	Bottled water	2.2 (up .3)
Milk	20.5 (down .1)	Spirits	1.9 (down .1)
Juices	6.6 (down .1)		
Tea	6.3 (down .3)		

Subtotal ..... 136.4 (down .4)
Imputed water consumption ..... 46.1 (up .4)
Total 182.5

Wine consumption *(see chart)*, relatively unchanged since 1980, experienced some shifts within the category. Despite the introduction of light and soft wines, as well as the expanding packaging mix, per capita consumption of domestic wines was off by 1.4%, according to Maxwell. Imported wines, on the other hand, increased for the third consecutive year, yet they still only constitute approximately one-quarter of all wine consumed.

A spokesman for the Wine Institute, a California trade association, declined comment on the drop in domestic wines, but disagreed with the figures.

Their figures showed that domestics were off .2% and California wines were up .1%. California wines represent just under 70% of the domestic wine market.

Many are pointing to the invasion of European wines into the U.S. market as one of the major factors in the reduction of per capita consumption of domestic wines.

The beer industry is having similar problems. Total industry sales increased only .4%, but the per capita consumption dropped from 26.7 to 26.4 gallons, according to Maxwell.

Imports were one of the few growth areas for the beer market, but they represent only 3.1% of the market and are growing slowly. Light beers were another growth category for the year. They increased from 13.8% of the market to 17.4% in 1982. Other areas didn't do as well, however.

Furthermore, Maxwell predicted that '83 volume will also be flat because "the rate of increase in beer consumption has been slipping for years and demographics are also becoming rather adverse."

other reverse trends

Per capita consumption of distilled spirits dropped from 2 to 1.9 gallons. It was the first change in per capita consumption since 1974, but this drop was no surprise since this is the third straight year volume has dropped.

In 1982, the industry was off 2% in volume. Maxwell attributed the decrease to the economy and lifestyle changes. In addition, Maxwell didn't foresee much improvement in the future.

He did note that premium brands

continued to sell well as did the brands at the low end of the market.

Lack of growth in the wine category, as well as the decrease in per capita consumption of beer and distilled spirits reflect the current trend away from alcoholic beverages, according to Maxwell.

This trend was first noted a year ago by industry observers, who also predicted an increase in the growth of bottled water as consumers become more health conscious. The figures in the charts bear out these predictions. This is the sixth consecutive growth year for the bottled water industry and observers expect this trend to continue into the 1980s.

But it's not only alcoholic beverages that are having problems. Coffee consumption continued to drop, as it has every year since 1962, according to Maxwell. Per capita consumption of coffee dropped from 26.7 in 1981 to 26.4 in 1982.

"We see no immediate signs of a turn in coffee consumption, although the rate of decrease is certainly abating," said Maxwell. The same can be said for tea, which dropped from 6.5 to 6.3 gallons per capita in 1981-82.

projections

Overall, Maxwell continues to project that it will be the cold and sweet drinks that will remain popular with consumers. In addition, he believes lifestyle changes will continue to make alcoholic beverages less popular since consumers appear to be more health-oriented and concerned about what they consume. □

Estimated tea sales trends

(million lbs.)

	1977		1978		1979		1980		1981		1982	
	Amount	Pct.	Amount	Pct.	Amount	Pct.	Amount	Pct.	Amount	Pct.	Amount	Pct.
Iced Tea	107.84	67.7%	108.16	66.5%	105.28	66.4%	108.16	68.1%	105.06	67.3%	103.55	66.8%
Hot Tea	51.36	32.3	48.82	31.5	48.74	31.6	49.84	31.9	50.94	32.7	51.45	33.2
Total	159.00	100.0%	164.63	100.0%	154.00	100.0%	158.00	100.0%	156.00	100.0%	155.00	100.0%

Estimated wine consumption

(gallons per capita)

	1976	1977	Change	1978	Change	1979	Change	1980	Change	1981	Change	1982	Change
Domestic	1.459	1.510	3.5%	1.726	14.3%	1.742	0.9%	1.808	3.7%	1.847	2.3%	1.821	(1.4)%
Imported	0.273	0.313	14.7	0.421	34.5	0.408	(3.1)	0.449	10.0	0.493	9.8	0.525	6.5
Total	1.732	1.823	5.3%	2.147	17.8%	2.150	0.1%	2.256	4.9%	2.340	3.8%	2.346	0.3%

U.S. Liquid consumption trends

(gallons per capita)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Soft Drinks	19.1	20.3	22.3	23.5	24.8	25.9	27.0	28.6	30.1	31.5	31.4	31.0	33.7	35.9	37.1	38.1	39.8	39.5	40.1
Coffee*	38.8	37.8	37.4	37.0	37.0	36.2	35.7	35.3	35.2	35.1	33.8	33.0	29.4	28.0	27.0	27.7	26.8	26.7	26.4
Beer	15.9	15.9	16.5	16.6	17.3	17.8	18.5	19.2	19.7	20.5	21.3	21.8	21.8	22.5	23.1	23.8	24.3	24.8	24.4
Milk	25.9	26.0	26.9	25.3	23.6	23.3	23.1	23.0	23.1	22.7	22.0	22.3	22.1	21.9	21.6	21.4	20.9	20.6	20.5
Juices	3.8	3.8	4.0	4.8	4.7	4.8	5.2	5.7	6.1	6.1	6.2	6.9	6.9	8.9	6.8	6.7	6.9	6.7	6.7
Tea	4.6	4.9	5.2	5.1	5.3	5.2	5.5	5.8	5.9	6.3	6.2	6.2	6.4	6.9	6.7	6.6	6.6	6.5	6.3
Powdered Drinks	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	5.5	5.9	6.1	6.0	6.0	6.0	6.0
Wine	1.0	1.0	1.0	1.0	1.1	1.2	1.3	1.5	1.6	1.7	1.7	1.7	1.7	1.8	2.1	2.2	2.3	2.3	2.3
Bottled Water	NA	NA	NA	NA	NA	NA	NA	1.1	NA	NA	NA	1.2	1.2	1.3	1.4	1.5	1.6	1.9	2.1
Distilled Spirits	1.4	1.6	1.6	1.6	1.7	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9
Subtotal	110.4	111.3	113.9	115.1	117.6	118.2	118.1	122.1	123.8	125.8	124.6	130.7	130.7	133.1	133.7	136.0	136.2	137.0	138.7
Imputed Water Consumption**	72.1	71.3	68.6	67.4	65.0	64.3	64.4	60.4	58.9	57.6	57.9	51.8	51.8	49.4	48.8	46.6	46.3	45.5	43.6
Total	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.3

Coffee data is based on a three-year moving average to counteract/balance inventory swings, thereby smoothing the consumption more realistically.
*Includes all others.
**Revised.
NA=Not available.

Copyright: John Maxwell, Beverage Industry, May 20, 1983

Source: USDA ERS, USDA, Adam, Lilien, Beverage estimates.

U.S. population demographics

1980 - 1990 Population projection by age (000)

	Total U.S.	North East	South	East Central	West Central	South West	West	Pacific
Total 1980	228,497.1	54,630.4	47,714.8	47,466.5	17,281.8	21,663.0	7,500.8	32,239.8
0 - 17	27.9%	26.4%	28.1%	28.7%	27.8%	29.5%	30.7%	27.1%
18 - 24	13.2%	12.7%	13.2%	13.3%	13.3%	13.9%	13.4%	13.7%
25 - 34	16.7%	16.2%	16.2%	16.5%	16.2%	17.1%	18.7%	18.4%
Total 1985	232,371.3	57,540.8	47,996.5	48,856 .1	17,493.4	21,087.7	7,240.6	32,156.2
5 - 14	14.2%	13.4%	14.4%	14.6%	13.8%	15.2%	15.3%	13.7%
15 - 24	16.5%	16.2%	16.5%	16.4%	16.6%	16.6%	16.7%	16.8%
25 - 34	17.0%	16.9%	16.7%	17.4%	17.2%	16.2%	18.1%	17.4%
Total 1990	243,004.6	59,272.9	50,789.7	50,511 .4	18,016.4	22,508.9	7,721.6	34,184.1
5 - 14	14.4%	14.2%	13.2%	15.3%	15.0%	15.6%	15.6%	14.4%
15 - 24	14.3%	13.7%	14.4%	14.7%	13.9%	14.7%	15.6%	14.4%
25 - 34	16.7%	16.9%	16.4%	17.3%	16.7%	15.2%	16.9%	17.3%

Source: Census Data Population Estimates - Series II-A
Beverage Marketing Corp.; Beverage Data Bank

Copyright: Beverage Industry
September 15, 1982

Population projections 1985-1990

	Total U.S.	North East	South	East Central	West Central	South West	West	Pacific
Total 1985	232,371.3	57,540.8	47,996.5	48,856.1	17,493.4	21,087.7	7,240.6	32,156.
5 - 14	32,826.2	7,674.0	6,891.6	7,105.5	2,432.8	3,214.1	1,104.4	4,402.
15 - 24	38,224.0	9,323.4	7,876.6	8,056.2	2,862.6	3,505.8	1,245.2	5,354.
25 - 34	39,476.7	9,663.6	7,985.5	8,501.9	2,994.1	3,420.0	1,273.4	5,638.
Total 1990	243,004.6	59,272.9	50,789.7	50,511.4	18,016.0	22,508.9	7,721.6	34,184.
5 - 14	35,090.1	8,394.4	6,702.6	7,702.9	2,656.4	3,507.2	1,211.2	4,915.
15 - 24	34,717.5	8,112.8	7,312.6	7,429.2	2,482.3	3,318.3	1,167.7	4,894.
25 - 34	40,560.3	9,935.6	8,287.3	8,653.2	3,044.2	3,396.7	1,327.0	5,916.

Source: Census Data Population Estimates - Series II-A
Beverage Marketing Corp.; Beverage Data Bank

Copyright: Beverage Industry
September 15, 1982

Isotonic beverage sales to reach $275M by '85

Isotonic beverage sales will hit $275 million by 1985, says a report published by Packaged Facts in New York.

Isotonic beverages, led by Stokely-Van Camp's popular Gatorade, have been sold directly to industrial plants and factories since 1976. It had been discovered that these products could help maintain the electrolyte balance of employees working in environments where heat stress or physical exertion cause loss of body salts through perspiration.

David A. Weiss, president of Packaged Facts, contends that more employers will tap isotonic beverages as being valuable to their employees as the economy "picks up."

"To date, industries served by the isotonic beverage market reflect only the tip of the iceberg," Weiss says. "As soon as the economy recovers, organized labor will press employers to make these beverages available on factory and construction job sites."

Professional sports teams, including football, basketball and hockey, use the beverages as well. The growth in sports participation by Americans in the last decade has had an especially favorable effect on the retail segment of the market. As the report points out, isotonic beverages are often directly positioned as a sports aid, and are therefore strongly identified with athletic activities.

Gatorade again dominates this segment of the market with an amazing 95% share of sales.

However, Gatorade has a new challenger, Pripps Pluss, developed by A.B. Pripps Brygerier, a $450 million company which controls 70% of the beverage market in Sweden.

During the past year, Pripps Pluss has been introduced into the U.S. and poses a serious challenge to Gatorade and other isotonic beverage brands. One of the newcomer's advantages is that it is the first—and so far, the only—isotonic beverage to receive approval from the Food and Drug Administration to call and promote itself as an "energy drink."

Pripps' distribution

Pripps Brygerier has chosen Thomas J. Lipton Co. to handle retail distribution. According to Packaged Facts, the Lipton marketing expertise, fueled by a large promotional introductory budget reportedly at $6 million, combine to form one of the most formidable new-product campaigns in the history of the isotonic beverage market.

But even though competition is heating up in the market, it still seems to appear Gatorade is as strongly entrenched as ever. Some of the older brands are still on the market, but, as before, present no serious threat to Gatorade, according to the report.

Quickick is a powdered mix marketed by Quickick, Inc. and still has an estimated 10% to 15% share of the institutional segment and, according to the company, a 50% share of the industrial market. The report notes Quickick does not seem to have any more plans to enter the retail segment, having failed with its liquid isotonic drink in 1970 and its powdered version in 1978.

Quenchade is still in the market, under the direction of Curt Mueller, ex-athlete turned pharmacist. His original product, Time

Projected sales: isotonic beverages

	Sales (Millions)		Percent Change
	1981	1985	
Retail	$ 90	$120	+ 33%
Institutional	45	65	+ 44
Industrial	45	90	+100
Total	$180	$275	+ 53%

Source: Packaged Facts

Copyright: Beverage Industry, February 25, 1983

Projected sales and growth: isotonic beverages (1977-1981)

	Sales (Millions)		Percent Change
	1977	1981	
Retail	$45	$90	+100%
Institutional		45	—
Industrial	25	45	—
Total	$70	$180	157%

Source: Packaged Facts

Copyright: Beverage Industry, February 25, 1983

Off Punch, re-entered the market in 1974 as Quenchade to capitalize on the name of his company's other major product, Quench isotonic gum, the report says. Now in powdered form, Quenchade continues to be marketed in the institutional segment, where it has been sold for about 20 years.

National advertising expenditures by media: leading isotonic beverage brands (1981)

(Thousands)

Brand/Manufacturer	Total	Magazines	Newspaper Supplements	Network TV	Spot TV	Network Radio	Outdoor
Gatorade (Stokely-Van Camp)	$4,264.0	$1,375.6	$4.7	$241.6	$1,965.6	–	676.5
Pripps Pluss (A.B.Pripps Brygerier)	145.5	–	–	–	145.5	–	–
Squincher (Universal Industries)	79.5	–	–	–	71.1	–	8.4
Rangerade (Texas Rangers Basketball Club)	74.6	–	–	–	74.6	–	–
Wagner Thirst Quencher (Westin, Inc.)	29.5	–	–	–	29.5	–	–
Total	**$4,593.1**	**$1,375.6**	**$4.7**	**$241.6**	**$2,286.3**	**–**	**$684.9**

Source: Leading National Advertisers

Copyright: Beverage Industry
February 25, 1983

National advertising expenditures: 1977-1981

(Thousands)

Brand/Manufacturer/Type	1977	1978	1979	1980	1981
Gatorade (Stokely-Van Camp)	$1,510.0	$2,858.4	$5,389.9	$2,907.2	$4,264.0
Drink for industry	–	–	13.1	26.2	–
Carbonated beverage	5.0	15.0	28.0	–	10.7
Instant beverage mix	–	328.8	2,073.1	393.5	970.2
Noncarbonated drink	1,237.0	2,490.4	2,497.7	1,055.2	753.8
Regular and carbonated	48.0	24.2	76.5	16.7	850.6
Regular and instant	–	–	701.5	1,415.6	1,678.7
Premium offers	220.0	–	–	–	–
Pripps Pluss (A.B. Pripps Brygerier)					
Powdered mix	–	–	–	–	$ 145.5
Squincher (Universal Industries)					
Type unknown	–	–	–	14.1	$79.5
Rangerade (Texas Ranger Basketball Club)					
Type unknown	–	–	–	–	$74.6
Wagner Thirst Quencher (Westin, Inc.)					
Noncarbonated beverage	–	–	$45.8	$1,082.9	$29.5
Total	**$1,510.0**	**$2,858.4**	**$5,435.7**	**$4,004.2**	**$4,593.1**

Source: Leading National Advertisers

Copyright: Beverage Industry
February 25, 1983

Also still in the retail segment is Polar Chilled Products' Super Socco. Its best-selling area is California, Package Facts reports.

Meanwhile, newer brands, such as Universal Industries' Squincher and Arla's Nature's Wonder, keep entering the market. The former is a line of multi-flavored isotonic beverages, while the latter, another Swedish product, is being sold mostly in the Midwest.

Stokely-Van Camp now manufactures a product, Gatorade 280, which was introduced in 1981 to the institutional segment.

"loading"

Gatorade 280 is a "high energy carbohydrate drink mix used for 'loading' when an athlete needs a continuous stream of energy," as in the case of running, the report says. The idea behind Gatorade 280 (and loading) is that when taken three hours before the strenuous activity, the drink passes through the body quickly, leaving behind the carbohydrate uplift—but without the heavy residue of a substantial meal. According to product advertising, it can "enhance performance during athletic or during other strenuous activities."

Gatorade 280 contains three 12-oz. servings, each of which when mixed with water, can provide 280 calories. This is equivalent in energy to almost seven cups of pasta—but without the pasta's heaviness.

Distribution of Gatorade started in sporting goods outlets, and according to Stokely-Van Camp, there will be no attempt to market the 280 brand to any other but the institutional market.

So far, Stokely-Van Camp has been able to ward off competitive threats fairly easily, the report points out. However, in the case of Pripps Pluss, no other competitor spent as much to dethrone Gatorade as Pripps said it will spend on Pripps Pluss' introduction.

Presently, Pripps Pluss has made wide gains in the institutional segment. According to one trade account, despite Gatorade's links with professional sports, Pripps Pluss already has cornered two of every three professional basketball teams, almost one-third of the national football teams, eight major league baseball squads, four national hockey teams, and all the national soccer teams, indoor and outdoor.

The brand has begun to be marketed in the retail and industrial segments. Some consumer advertising has also begun regionally.

disadvantage?

When Pripps Pluss moves into the retail segment, it will have a competitive advantage that no other isotonic beverage brand—not even Gatorade—has. That's the FDA's approval to call itself an "energy drink." However, the product has what many in the industry believe is a definite competitive disadvantage—its resemblance to water. It is a clear transparent liquid and could thus be confusing to those who buy and drink it, according to the Packaged Facts report.

Prevailing package types are pouches and bottles, though cans, tins and other containers are used. In shipping, the packages are sold in case loads and transported in cardboard cartons.

Color combinations are usually pastel-colored packages, mainly orange or green.

The Packaged Facts study also describes labeling on packages as well: Pouches containing the powdered beverage have directions for dilution on the back, while the front panel contains some identification of the product, such as "thirst quencher" on the Gatorade label and "exercise drink" on the Wagner Thirst Quencher label.

Bottle and container-type labeling are similar except that mixing directions are not included.

Copies of the report are available at $550 each from the company, which is located at 274 Madison Ave., New York, N.Y. 10016. □

National advertising expenditures: 1979-1981

(Thousands)

Brand/Manufacturer/Type	1979	1980	1981
Gatorade (Stokely-Van Camp)	$5,389.9	$2,907.2	$4,284.0
Drink for industry	13.1	26.2	—
Carbonated beverage	28.0	—	10.7
Instant beverage mix	2,073.1	393.5	970.2
Noncarbonated drink	2,497.7	1,056.2	753.8
Regular and carbonated	76.5	16.7	850.6
Regular and instant	701.5	1,415.6	1,678.7
Premium offers	—	—	—
Pripps Pluss (A.B. Pripps Brygerier)			
Powdered mix	—	—	$ 145.5
Squincher (Universal Industries)			
Type unknown	—	14.1	$79.5
Rangerade (Texas Ranger Basketball Club)			
Type unknown	—	—	$74.6
Wagner Thirst Quencher (Westin, Inc.)			
Noncarbonated beverage	$45.8	$1,082.9	$29.5
Total	$5,435.7	$4,004.2	$4,593.1

Source: Leading National Advertisers

Copyright Beverage Industry February 28, 1982

Diet, no-caffeine lemon-lime's led industry growth in '82

Lemon-lime, diet and caffeine-free brands led the soft drink industry sales in 1982, and were mostly responsible for the small growth the industry had.

Overall, lemon-lime consumption was up slightly in market share, along with orange and the "all others" category. Colas, root beer and pepper-type drinks were down in share, largely because of the caffeine issue.

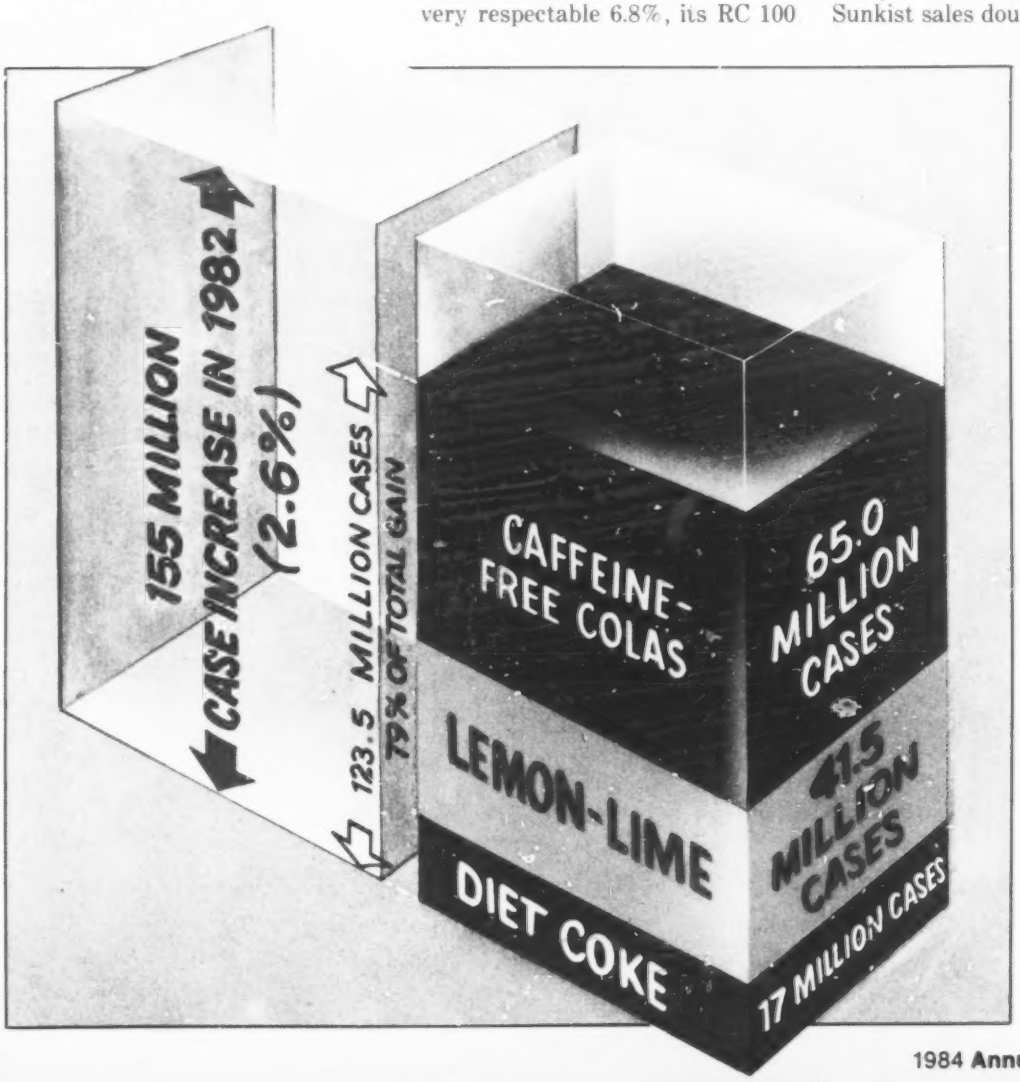
Sales were up only 2.6% industrywide, just shy of 1981's 2.7% increase, according to John Maxwell, **BI**'s director of research statistics.

Still, per capita consumption reached an all-time high at 40.1 gallons and some brands posted an exceptional year, particularly the diet and caffeine-free brands.

For instance, while Royal Crown's sales volume increased a very respectable 6.8%, its RC 100 (regular and sugar-free) jumped a spectacular 145%.

Seven-Up had a remarkable year credited to its "never had it, never will" no-caffeine advertising campaign. It boosted sales 12.2%, according to Maxwell, and replaced Dr Pepper as third most popular soft drink in the country.

Sunkist, which cracked the top 10 in 1981, continued its success story with an 18.4% boost. Diet Sunkist sales doubled.



Consumption of soft drinks, by company

1978 Mil. Cases	1978 Pct. Market	1979 Mil. Cases	1979 Pct. Market	1980 Mil. Cases	1980 Pct. Market	1981 Mil. Cases	1981 Pct. Market		1982 Mil. Cases	1982 Pct. Market	1981-82 Change
								Coca Cola Co.			
1,335.0	24.3%	1,365.0	23.9%	1,425.0	24.3	1,463.0	24.2%	Coca-Cola	1,478.0	23.9%	1.0%
158.0	2.9	165.0	2.9	171.0	2.9	178.0	2.9	Sprite	197.5	3.2	11.0
149.0	2.7	170.0	3.0	188.0	3.2	216.0	3.6	Tab	237.0	3.8	9.7
112.0	2.0	107.0	1.9	98.0	1.7	88.0	1.5	Fanta	80.0	1.3	(9.1)
46.0	0.8	43.0	0.8	39.0	0.7	34.0	0.6	Mr. Pibb	29.5	0.5	(13.2)
27.0	0.5	25.0	0.4	26.0	0.4	24.0	0.4	Fresca	19.2	0.3	(20.0)
—	—	38.0	0.7	50.0	0.8	53.0	0.9	Mello Yello	50.0	0.8	(5.7)
—	—	—	—	—	—	—	—	Diet Coke	17.0	0.3	—
19.0	0.4	23.0	0.4	25.0	0.4	26.0	0.4	Others	26.0	0.4	—
1,846.0	33.6	1,936.0	34.0	2,022.0	34.4	2,082.0	34.5	Total	2,134.2	34.5	2.5
								PepsiCo, Inc.			
969.0	17.6	1,022.0	17.9	1,056.0	17.9	1,104.0	18.3	Pepsi-Cola	1,120.0	18.1	1.4
130.0	2.4	156.0	2.8	169.0	2.9	179.0	3.0	Mountain Dew	175.0	2.8	(2.2)
127.0	2.3	142.0	2.5	154.0	2.6	173.0	2.9	Diet Pepsi	180.0	2.9	4.0
22.0	0.4	24.0	0.4	24.0	0.4	29.0	0.5	Pepsi Light	30.0	0.5	3.4
14.0	0.3	15.0	0.3	15.0	0.3	14.0	0.2	Teem	10.0	0.2	(28.6)
—	—	—	—	—	—	—	—	Pepsi Free and Sugar Free Pepsi Free	20.0	0.3	—
19.0	0.3	18.0	0.3	17.0	0.3	16.0	0.2	Others	15.0	0.2	(6.3)
1,281.0	23.3	1,377.0	24.2	1,435.0	24.4	1,515.0	25.1	Total	1,550.0	25.0	2.3
								Dr Pepper Co.			
299.5	5.4	311.5	5.5	323.0	5.5	326.0	5.4	Dr Pepper	315.4	5.1	(3.3)
60.5	1.1	62.9	1.1	69.1	1.2	79.5	1.3	Sugar Free Dr Pepper	81.5	1.3	2.5
360.0	6.5	374.4	6.6	392.1	6.7	405.5	6.7	Total	396.9	6.4	(2.1)
								Canada Dry Corp.			
55.0	1.0	56.7	0.9	60.2	1.0	63.2	1.1	Ginger Ale	68.0	1.1	7.6
25.0	0.5	26.5	0.5	26.8	0.4	28.0	0.5	Tonic, Bitter Lemon	29.1	0.5	3.9
18.0	0.3	20.7	0.4	27.0	0.5	33.0	0.5	Club Soda	36.5	0.6	10.6
15.0	0.3	15.5	0.3	15.3	0.3	14.3	0.2	Barrelhead	13.0	0.2	(9.1)
5.5	0.1	5.0	0.1	4.0	0.2	4.2	0.1	Wink	3.4	0.1	(19.0)
40.0	0.7	38.0	0.7	31.0	0.5	25.0	0.4	Others	21.0	0.3	(16.0)
158.5	2.9	162.4	2.9	164.3	2.8	167.7	2.8	Total	171.0	2.8	2.0
60.0	1.1	57.0	1.0	54.5	0.9	44.0	0.7	Cott Corp.	38.5	0.6	(12.5)
31.0	0.6	31.0	0.5	30.0	0.5	31.6	0.5	Welch's	31.7	0.5	0.3
22.4	0.4	22.4	0.4	21.0	0.4	20.0	0.3	No-Cal	19.4	0.3	(3.0)
631.9	11.5	647.2	11.4	661.9	11.3	668.8	11.0	Grand Total	657.5	10.6	(1.7)
								Seven-Up Co.*			
322.0	5.9	320.0	5.6	317.0	5.4	301.0	5.0	7-Up	325.0	5.2	8.0
63.0	1.1	63.3	1.1	64.0	1.1	70.0	1.2	Diet 7-Up	79.0	1.3	12.9
—	—	—	—	—	—	—	—	LIKE	16.0	0.3	—
10.2	0.2	10.0	0.2	9.0	0.2	8.0	0.1	Dixie Cola	6.0	0.1	(25.0)
1.0	—	1.0	—	1.0	—	1.0	—	Howdy Flavors	0.5	—	(50.0)
396.2	7.2	394.6	6.9	391.0	6.7	380.0	6.3	Total	426.5	6.9	12.2%
								Royal Crown Co.			
164.0	3.0%	159.0	2.8%	166.5	2.9%	149.0	2.5%	Royal Crown	144.0	2.3	(3.4)
—	—	—	—	—	—	20.0	0.3	RC 100 (Regular & Sugar Free)	49.0	0.8	145.0
40.2	0.7	38.0	0.7	37.0	0.6	37.0	0.6	Diet Rite Cola	35.0	0.6	(5.4)
53.5	1.0	53.0	0.9	50.0	0.8	43.0	0.7	Nehi and Others	38.0	0.6	(11.6)
257.7	4.7	250.0	4.4	253.5	4.3	249.0	4.1	Total	266.0	4.3	6.8
106.5	1.9	100.0	1.7	105.0	1.8	109.0	1.8	Shasta Beverages	129.0	2.1	18.3

‡Division of Consolidated Foods Corp. Total for 1982 includes C&C Cola volume for nine months.
°Subsidiary of United Brands Co.

*Subsidiary of Philip Morris, Inc.

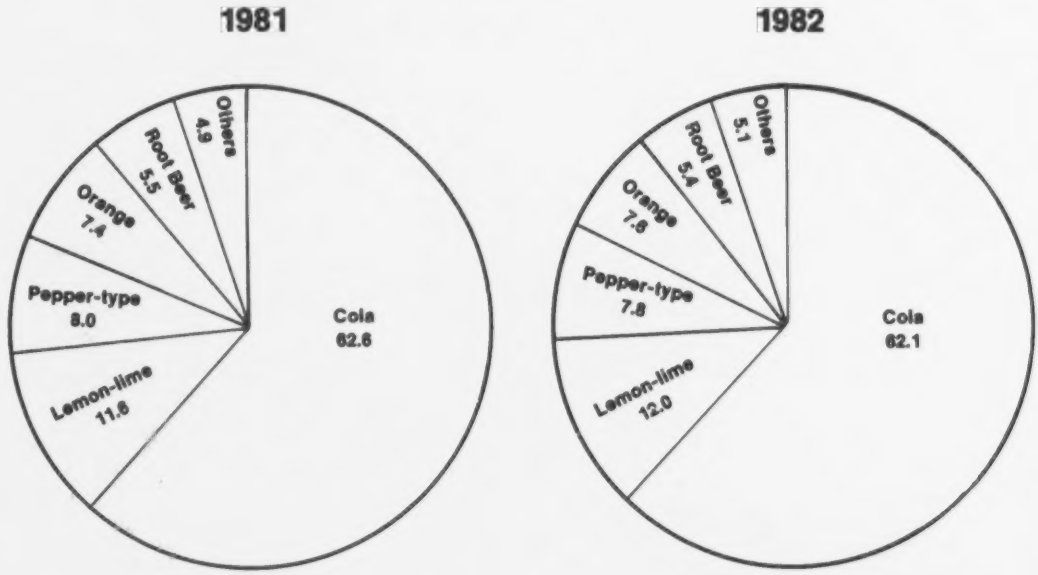
Consumption of soft drinks, by company

1978 Mil. Cases	1978 Pct. Market	1979 Mil. Cases	1979 Pct. Market	1980 Mil. Cases	1980 Pct. Market	1981 Mil. Cases	1981 Pct. Market		1982 Mil. Cases	1982 Pct. Market	1981-82 Change
9.0	0.2	35.0	0.6	76.0	1.3	88.0	1.5	Sunkist	96.0	1.6	9.1
—	—	—	—	2.0	—	10.0	0.1	Diet Sunkist	20.0	0.3	100.0
9.0	0.2	35.0	0.6	78.0	1.3	98.0	1.6	Total	116.0	1.9	18.4
								Monarch Co.			
23.2	0.4	19.0	0.3	18.0	0.3	17.0	0.3	Nesbitts	17.3	0.3	1.8
NA	—	15.0	0.3	16.0	0.3	17.0	0.3	Frostie Root Beer	16.8	0.3	(1.2)
15.1	0.3	14.3	0.2	14.4	0.2	14.4	0.2	NuGrape	15.0	0.3	4.2
9.3	0.2	8.9	0.2	8.5	0.2	8.4	0.1	Sun Crest	8.3	0.2	(1.2)
2.2	—	2.2	—	2.2	—	2.2	—	Maxie	2.3	—	4.5
1.0	—	0.7	—	NA	—	NA	—	Kickapoo	NA	—	—
4.3	0.1	3.9	0.1	3.5	0.1	3.0	0.1	Mason's Root Beer	2.5	—	(16.7)
2.5	—	2.1	—	1.9	—	0.7	—	Fiavette	NA	—	—
2.4	—	2.0	—	1.8	—	1.3	—	Dr. Wells	1.1	—	(15.4)
26.9	0.5	31.9	0.6	33.0	0.6	34.0	0.6	Other	33.0	0.5	(2.9)
86.9	1.5	100.0	1.7	99.3	1.7	98.0	1.6	Total	96.3	1.6	(1.7)
								Consolidated Chocolate Co.			
2.4	—	2.6	0.1	2.7	0.1	2.8	0.1	Chocolate Soldier	3.0	0.1	7.1
1.3	—	1.4	—	1.4	—	1.4	—	Brownie	1.4	—	—
1.8	—	1.9	—	2.0	—	2.0	—	Choc-ola	2.0	—	—
4.5	0.1	4.7	0.1	4.9	0.1	5.0	0.1	Other	5.4	0.1	8.0
10.0	0.2	10.6	0.2	11.0	0.2	11.2	0.2	Total	11.8	0.2	5.4
96.9	1.7	110.6	1.9	110.3	1.9	109.2	1.8	Grand Total	108.1	1.8	(1.0)
								Cadbury			
43.0	0.8	55.8	1.0	64.8	1.1	72.0	1.2	Schweppes USA, Inc.	81.5	1.3	13.2
								Crush International			
51.3	0.9	54.8	1.0	56.8	1.0	59.1	1.0	Hires, Crush, etc.	65.0	1.1	10.0
7.9	0.2	8.2	0.1	8.5	0.1	8.7	0.1	Sun Drop	9.5	0.1	9.2
59.2	1.1	63.0	1.1	65.3	1.1	67.8	1.1	Total	74.5	1.2	9.9
40.0	0.7	47.6	0.8	53.8	0.9	64.0	1.1	Squirt Co.	70.5	1.1	10.2
								A & W Beverages			
32.3	0.6	37.5	0.7	40.0	0.7	41.1	0.7	A & W	42.6	0.7	3.6
13.9	0.2	16.5	0.2	18.0	0.3	19.9	0.3	Sugar Free A & W	21.9	0.3	10.1
46.2	0.8	54.0	0.9	58.0	1.0	61.0	1.0	Total	64.5	1.0	5.7
								Dad's Root Beer Co			
34.0	0.6	33.5	0.6	34.1	0.6	34.0	0.6	Dad's Root Beer	32.6	0.5	(4.1)
17.0	0.3	16.0	0.3	15.6	0.3	18.5	0.3	Bubble Up	18.2	0.3	(1.6)
7.0	0.1	6.5	0.1	6.7	0.1	6.8	0.1	Diet Dad's	6.9	0.1	1.5
58.0	1.0	56.0	1.0	56.4	1.0	59.3	1.0	Total	**57.7**	**0.9**	**(2.7)°**
35.8	0.7	39.1	0.7	39.9	0.7	39.0	0.7	Double Cola Co.	40.0	0.6%	2.0
26.1	0.5	23.9	0.4	22.1	0.4	25.2	0.4	Faygo	29.8	0.5	18.0
29.0	0.6	29.0	0.5	29.5	0.5	29.5	0.5	Frank's Beverages	28.0	0.5	(5.0)
7.9	0.1	11.6	0.2	13.9	0.2	16.9	0.3	Barq's	19.1	0.3	13.0
12.5	0.2	12.5	0.2	12.8	0.2	13.5	0.2	Cragmont (Safeway)	13.8	0.2	2.7
12.0	0.2	11.0	0.2	10.5	0.2	11.0	0.2	Check (Winn-Dixie)	12.0	0.2	9.0
9.3	0.2	9.9	0.2	10.2	0.2	11.0	0.2	Big K (Kroger)	11.5	0.2	4.5
8.5	0.1	8.0	0.1	8.0	0.1	7.2	0.1	Cotton Club	6.8	0.1	(5.0)
NA	—	2.6	0.1	2.9	—	3.1	0.1	Yukon (A&P)	3.5	0.1	12.5
5,012.7	91.1	5,274.4	92.5	5,504.8	93.7	5,691.5	94.3	Total	5,900.5	95.3	3.7
487.3	8.9	425.6	7.5	370.2	6.3	343.5	5.7	Others	289.5	4.7	(15.7)
5,500.0	100.0%	5,700.0	100.0%	5,875.0	100.0%	6,035.0	100.0	Grand Total	6,190.0	100.0%	2.6

Source: Lehman Brothers Kuhn Loeb Research

Copyright: John C. Maxwell, Beverage Industry April 22, 1983

Estimated market share of soft drinks



Source: Lehman Brothers Kuhn Loeb Research

Copyright: John C. Maxwell and Beverage Industry April 22, 1983

While root beer continued its overall decline in popularity, Barq's, A&W and Hires had good years.

Other companies posting good years included Shasta Beverages, Cadbury Schweppes USA, Crush International, Squirt Co. and Faygo.

There was only one change in the top 10 most popular soft drinks: Seven-Up and Dr Pepper switched positions. Coke remains first, followed by Pepsi, Seven-Up, Dr Pepper, Tab, Sprite, Diet Pepsi, Mountain Dew, Royal Crown Cola and Sunkist.

Maxwell's 1982 figures don't reveal any startling trends, but there are some that deserve observation.

Maxwell suggests that the increase in market share for lemon-lime, orange and "all others" and the decrease for the colas could signify the beginning of a trend.

"Most of the non-cola drinks seem to have gained share, and there is some thought people are looking for new taste sensations, which may be at least partially true," he said in his report.

Others believe that a more plausible reason is the success story of individual brands that are increasing the market share of categories like lemon-lime.

"If you believe the market reports, colas have had more than 60% of the market for years. You don't think people are going to all of the sudden change their tastes," one industry source said.

"Fifty years ago, chocolate and vanilla ice cream had 75% of that market and the same will be true 100 years from now. Some things just don't change," he added.

Other figures in the lemon-lime category add credence to that. While Coke's Sprite jumped 11%, Pepsi's Teem was off 28.6% and Bubble Up was slightly off with a 1.6% drop.

Diet and caffeine-free drinks should continue to hold an important place in the market, according to Maxwell.

"The diet area . . . is approaching 15% of the overall soft drink mar-

The Winners

Sunkist	Up 18.4%
Shasta	Up 18.3%
Faygo	Up 18.3%
Schweppes	Up 13.2%
Barq's	Up 13.0%
Yukon (A&F)	Up 12.9%
Seven-Up	Up 12.2%
Squirt Co.	Up 10.2%
Crush International	Up 9.9%
Check (Winn-Dixie)	Up 9.1%
Royal Crown	Up 6.8%
A&W	Up 5.7%
Big K (Kroger)	Up 4.5%

Estimated market share by type*

1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
63.0%	63.0%	63.0%	62.5%	61.7%	62.1%	62.2%	62.4%	62.3%	62.3%	62.4%
12.0	12.0	12.0	12.5	12.8	12.9	12.7	12.4	12.3	12.1	11.8
3.9	3.9	4.6	5.0	5.2	5.3	6.7	7.3	7.7	7.9	8.0
8.3	8.4	8.4	8.2	8.0	7.9	7.8	7.4	7.4	7.3	7.4
4.5	5.0	5.0	5.0	5.2	5.2	5.2	5.3	5.4	5.5	5.5
8.4	7.7	7.0	6.8	7.1	6.6	5.4	5.2	4.9	4.9	4.9
100.0%	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

*Includes diet drinks.

Source: Lehman Brothers Kuhn Loeb Research

ket. In fact, if it had not been for the diet and caffeine-free colas, the cola section of the industry would have dropped even more share in 1982," Maxwell said. The cola segment dropped .5% in share last year while the diet segment of the market jumped 8.8%.

"We feel that caffeine-free soft drinks will be a great growth area for the industry in 1983 and beyond. And products will increasingly annotate on their labels phrases like 'never had it, never will,' " Maxwell said.

Maxwell suggests that caffeine is probably the major factor in the loss of share by pepper-type drinks. Regular Dr Pepper was off 3.3%; Coke's Mr. Pibb was down 13.2%.

How important are caffeine-free soft drinks to the market and will they maintain their importance?

Seven-Up believes they will. "Seven-Up is advertised on the merits of good taste and quality as well as no-caffeine," said Edward W. Frantel, president and chief executive officer.

"Good taste and quality will always be in vogue. As for caffeine, we have seen over the past few years that consumers are more and more concerned about ingredients such as caffeine.

"As long as that interest and concern continues, and there is no indication that it will not continue, then consumers will most probably be interested and aware that Seven-Up does not contain caffeine," he added.

But others aren't so sure. "This will be the peak caffeine-free year," one industry source said. "But after that it's hard to speculate. Who knows what '84, '85 or '86 will hold. I think it will die if Coke doesn't get into it. They're such a major force in the industry," he added.

While caffeine-free and diet drinks are being credited for the industry's growth, some believe they could be detrimental in the long run.

"Caffeine-free soft drinks get people worried about the contents of soft drinks. Before, people never really thought about their contents. Soft drinks have always had a clean, safe image, but this gets people wondering about them," said one source.

Seven-Up refutes this though. "I see no reason to believe that the industry has been hurt in any way," said Frantel.

"If anything, our advertising has shown that we are concerned with consumers' interests. I don't believe that could be bad for the in-

Top ten drinks

1976			1977			1978			1979		
Mil. Cases	Pct. Market	Change	Mil. Cases	Pct. Market	Change	Mil. Cases	Pct. Market	Change	Mil. Cases	Pct. Market	Change
1,190.0	24.3	10.5%	1.290.0	24.5	8.4%	1,335.0	24.3	3.5%	1,365.0	23.9	2.2%
830.0	17.0	7.1	903.0	17.2	8.8	969.0	17.6	7.3	1,022.0	17.9	5.5
305.8	6.3	3.5	315.0	6.0	3.0	322.0	5.9	2.2	320.0	5.6	(0.6)
243.0	5.0	12.0	278.0	5.3	14.4	299.5	5.4	7.7	311.5	5.5	4.0
125.0	2.6	12.6	137.0	2.6	9.6	149.0	2.7	8.8	170.0	3.0	14.1
130.0	2.7	18.2	150.0	2.8	15.4	158.0	2.9	5.3	165.0	2.9	4.4
90.0	1.9	28.6	109.0	2.1	21.1	127.0	2.3	16.5	142.0	2.5	11.8
73.0	1.5	43.1	100.0	1.9	37.5	130.0	2.4	30.0	156.0	2.8	20.0
162.2	3.3	6.0	168.0	3.2	3.6	164.0	3.0	(2.4)	159.0	2.8	(3.0)
NA	—	—	NA	—	—	9.0	0.2	—	36.0	0.6	288.9
3,149.0	64.6	10.1%	3,450.0	65.6	9.6%	3,662.5	66.7	6.2%	3,845.1	67.5	5.0%

1981		1982
62.6%	Cola	62.1%
11.6	Lemon-Lime	12.0
8.0	Pepper Type	7.8
7.4	Orange	7.6
5.5	Root Beer	5.4
4.9	All Others	5.1
100.0%	Total	100.0%

Copyright: John C. Maxwell, Beverage Industry April 22, 1983

dustry. The industry itself has continued to grow, so obviously it is not bad for the industry. If it's so bad for the industry, then why has the entire industry, after such self-righteous outcries, followed us with no-caffeine brands of their own? Seems like it has helped the industry," he added.

On the other hand, diet drinks may pose a different problem, according to industry observers.

"People don't consume diet drinks in mass quantities like they consume regular soft drinks," said one source.

"If they grab enough of the market, they could have a negative effect on the industry. The trend toward diet soft drinks might represent more than weight consciousness. It could represent a trend toward moderation," he added.

In what turned out to be a disappointing year overall for the industry, some companies have been able to boast about double-digit volume increases.

"Seven-Up gained in popularity because it was aware that consumers were becoming more interested in caffeine . . . ," said Frantel. According to Maxwell, Seven-Up had a 12.2% volume gain for the year.

H. Alton LeBeau, Jr., president of Cadbury Schweppes USA, said his brands jumped 13.2% in 1982 because Schweppes has been working with bottlers on an effective marketing program and because more consumers are considering the high quality of Schweppes a better value.

"It was a combination of things for us," said Lou Lowenkron, president of A&W, whose sugar-free root beer posted a 10.1% increase.

Lowenkron said expansion into previously untapped markets, conversions from brokers to bottlers and a large advertising budget were the major factors in its success.

James Fletcher, senior vp-marketing and sales for Shasta, said an increase in distribution of brand sales in 2-L PET and the hiring of a new ad agency were the primary reasons for Shasta's 18.3% jump.

But, in addition, Shasta purchased C&C Cola from ITT and expanded distribution of its Capri Sun fruit drink, which helped sales. In fact, Capri Sun went national in January.

Don Tassone, spokesman for Procter & Gamble, which owns Crush International, said an increased advertising budget, reformulated flavors and new packag-

Per capita consumption of soft drinks

	Million cases consumed	Gallons per capita
1982	6,190.0	40.1
1981	6,035.0	39.5
1980	5,875.0	38.8
1979	5,700.0	38.1
1978	5,500.0	37.1
1977	5,260.0	35.9
1976	4,890.0	33.7
1975	4,460.0	31.0
1974	4,460.0	31.4
1973	4,440.0	31.5
1972	4,200.0	30.1
1971	3,950.0	28.6
1970	3,675.0	27.0
1969	3,475.0	25.9
1968	3,300.0	24.8
1967	3,100.0	23.5
1966	2,910.0	22.3
1965	2,625.0	20.3
1964	2,430.0	19.1
1963	2,245.0	17.9

1980			1981				1982		
Mil. Cases	Pct. Market	Change	Mil. Cases	Pct. Market	Change		Mil. Cases	Pct. Market	Change
1,425.0	24.3	4.4%	1,463.0	24.2	2.7%	Coca-Cola	1,478.0	23.9	1.0%
1,056.0	17.9	3.3	1,104.0	18.3	4.5	Pepsi-Cola	1,120.0	18.1	1.4
317.0	5.4	(0.9)	301.0	5.0	(5.0)	Seven-Up	325.0	5.2	8.0
323.0	5.5	3.7	326.0	5.4	0.9	Dr Pepper	315.4	5.1	(3.3)
188.0	3.2	10.6	216.0	3.6	14.9	Tab	237.0	3.8	9.7
171.0	2.9	3.6	178.0	2.9	4.1	Sprite	197.5	3.2	11.0
154.0	2.6	8.5	173.0	2.9	12.3	Diet Pepsi	180.0	2.9	4.0
169.0	2.9	8.3	179.0	3.0	5.9	Mountain Dew	175.0	2.8	(2.2)
166.5	2.9	4.7	149.0	2.5	(10.5)	Royal Crown Cola	144.0	2.3	(3.4)
76.0	1.3	117.1	88.0	1.5	15.8	Sunkist	96.0	1.6	9.1
045.5	68.9	5.2%	4,177.0	69.3	3.3%	Total	4,267.9	68.9	2.2%

ing were keys to its success.

Crush reformulated its Hires Root Beer to make it creamier and better tasting and is test marketing a reformulated orange Crush flavor.

Although he wouldn't give details, Tassone said Crush has also "enhanced promotions to make them more attractive."

The result is that Crush International saw its sales volume increase 9.9% last year.

"We're helping bottlers find answers to their number one problem—keeping prices down," said J.W. Brooks, president of Squirt, which had a 10.2% gain in 1982.

"We're trying to manage a franchise company with a bottler's hat on," Brooks added. "We're trying to understand the bottler's total needs."

He asserted that diet Squirt's taste is better than most diet drinks and this has won it acceptance in the market place.

But while there were some success stories, growth for the industry overall was only 2.6%. In addition, most don't anticipate much better this year.

"In 1983, we again look for modest growth in the industry, probably in line with the 2.6% increase of 1982," Maxwell speculated. "We point to the fact that for the first time during the 20-odd years that we've been tabulating per capita consumption of beverages, imputed water jumped meaningfully last year. We believe that this relates to the difficult economic situation that has faced the nation ... We may need to see the economy turn for at least a quarter or two before colored beverages in general, and soft drinks in particular, can show better forward momentum," said Maxwell.

Lowenkron blamed bad weather, a poor economy and high unemployment for the disappointing year.

Another source, who wished not to be identified, suggested the industry may be maturing. But, he added, "When an industry is coming off a few bad years, few will speculate that the next year will be a great one. That's just a safe attitude to take." □

Study: $50 million plants control $6 billion volume

The number of U.S. soft drink plants enjoying annual sales volume of $50 million or more has more than doubled during the past two years—from 33 such operations in 1980 to 67 in 1982. These plants represent a mere 4.32% of total U.S. plants, but now account for most business, an estimated $6.365 billion in wholesales volume, and 2.345 billion in gallons.

Meanwhile, more than half of soft drink sales were accounted for in 1982 by 11.9% of total plants, including the top 67 operations plus another 119 with annual sales of $25 million and above. These 186 plants, compared with 140 in 1980, reached an estimated sales volume of $10.827 billion, or 54.2% of the $19.9 billion market, and a product volume of 4.130 billion gallons, or 53.29% of the 7.748 billion-gallon total.

This is the data released from Beverage Marketing Corp.'s (BMC's) 1982 Sales Survey of U.S. Soft Drink Plants. The study includes details of concentration in the soft drink industry as well as national, regional and state breakdowns of company sales volume rankings, sales size and concentration, and gallonage size and concentration. And for the first time, the survey reveals every plant by company name, address and sales volume range.

This demographic picture has been compiled from information stored in BMC's Beverage Data Bank.

"Of the total number of soft drink plants in the U.S., the top 478 now account for 80% of industry dollar volume," explains Michael Bellas, president of Beverage Marketing Corp. "By the end of this century, it is easily feasible that as few as 500 plants will be supplying all industry needs."

One of the largest plants in the survey approximated just under $200 million in sales volume, according to Janet Fanshawe, BMC's director of marketing. "As more and more plants become larger in scale," she points out, "concentration is expected to become an increasingly important factor in the industry."

The study also shows that between 1980-82, 181 soft drink plants either went out of business, were acquired, or ceased to operate as production facilities.

Growth in the number of soft drink plants in the top three sales range categories—from $10 million to $50 million and above—appear to be at the expense of plants whose sales ranges were

from $500,000 to $10 million.

For example, plants in the $3 million to $5 million range declined in number from 359 in 1980 to 267 in 1982 or from 20.7% to 17.2% of the total number of U.S. soft drink plants.

In 1982, those plants showed an estimated sales volume of $1.068 billion or 5.3% of total, and an estimated gallonage of 400.5 billion. Those figures compare with $1.436 estimated sales in 1980, or 8.99% of the total, and 718 million gallons, or 8.5% of the total, the study indicates.

Numerically, the largest group of bottlers is in the $10 million to $25 million sales range, according to the study. They operated 292 plants in 1982, compared to 223 in 1980, with an estimated $5.110 billion in sales, or 25.6% of the total, and 2.044 billion gallons, or 26.38% of the total picture.

In 1980, this category of bottlers represented 12.88% of the total number of U.S. soft drink plants, compared to 18.81% in 1982. The 1980 estimated sales volume was $3.902 billion, or 24.42% of the total, and gallonage was at 2.007 billion, or 23.77%.

Of the eight categories in the 1982 Sales Survey, the fourth and only other group to show growth in the 1980-82 period were bottlers with sales of less than $500,000. The number of plants increased from 45 to 69, and represents 4.45% of the total, compared to 2.60% in 1980.

Soft drink bottlers in the southeastern states continue to rank first in number of plants, sales and gallonage. In 1982, there were 441 plants in the Southeast, 28.4% of the U.S. total, compared to 986.9 gallons in 1980.

Copies of the study and additional information are available from Beverage Marketing Corp., 866 Second Ave., New York, NY 10017; (212) 688-7640. Single copies may be purchased. □

1982 Regional soft drink demographics

Region	No. of plants	% of total	Estimated gallonage (add 000)	% of total	Estimated wholesale dollar volume (add 000)	% of total
New England	104	6.7	307,300	4.0	$ 793,750	4.0
Mideast	216	13.9	1,210,250	15.6	$3,138,450	15.7
Great Lakes	242	15.6	1,252,900	16.2	$3,230,250	16.2
Plains	156	10.1	591,900	7.6	$1,509,250	7.6
Southeast	441	28.4	2,224,800	28.7	$5,691,500	28.5
Southwest	171	11.0	1,008,300	13.0	$2,601,500	13.1
Rocky Mountain	65	4.2	248,000	3.2	$ 638,000	3.2
Far West	157	1.1	906,250	11.7	$2,337,450	11.7
Total	1,552		7,749,700		$19,940,150	

(a): Soft drink bottler and canner package and bulk gallonage only; does not include approximately 1.33 billion gallons of bulk syrup sales through other distribution. Total 1982 soft drink gallonage volume approximates 9.08 billion gallons.
(b): Soft drink bottler and canner package and bulk sales only; does not include approximately $1.3 billion of bulk syrup sales through other distribution. Total 1982 soft drink wholesaler dollar volume approximates $21.2 billion.

Source: Beverage Data Bank

Copyright: Beverage Industry, May 6, 1983

1982 national soft drink demographics

Sales range	Number of plants	Percent of total	Estimated gallonage volume (000)	Percent of total	Estimated wholesale sales (000)	Percent of total
$50 million or more	67	4.32	2,345,000	30.26	$ 6,365,000	31.9
$25 TO $50 million	119	7.67	1,785,000	23.03	$ 4,462,500	22.3
$10 to $25 million	292	18.81	2,044,000	26.38	$ 5,110,000	25.6
$5 to $10 million	266	17.14	798,000	10.30	$ 1,995,000	10.0
$3 to $5 million	267	17.20	400,500	5.17	$ 1,068,000	5.3
$2 to $3 million	250	16.11	250,000	3.23	$ 625,000	3.1
$1 to $2 million	176	11.34	105,600	1.36	$ 264,000	1.3
$500,000 to $1 million	44	2.84	13,200	.17	$ 33,000	.1
Less than $500,000	69	4.45	6,900	.09	$ 17,250	.0
Subtotal	1,550		7,748,200		$19,939,750	
Unclassified	2	.13	1,500	.02	$ 400	.0
Total	1,552		7,749,700(a)		$19,940,150(b)	

(a): Soft drink bottler and canner package and bulk gallonage only; does not include approximately 1.33 billion gallons of bulk syrup sales through other distribution. Total 1982 soft drink gallonage volume approximates 9.08 billion gallons.

(b): Soft drink bottler and canner package and bulk sales only; does not include approximately $1.3 billion of bulk syrup sales through other distribution. Total 1982 soft drink wholesaler dollar volume approximates $21.2 billion.

Source: Beverage Data Bank

Copyright: Beverage Industry, May 6, 1983

U.S. soft drink plants 1940-1982

State	1940	1950	1960	1970	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	100	139	109	73	52	47	45	42	37	33	29	28
Alaska	–	–	12	7	5	5	4	4	4	4	4	4
Arizona	30	43	33	23	25	23	23	22	24	23	21	21
Arkansas	89	120	76	53	40	37	32	33	29	28	25	25
California	243	304	203	141	125	117	113	109	106	95	91	94
Colorado	63	76	48	34	32	26	24	22	22	21	18	18
Connecticut	118	108	81	52	39	37	29	36	35	31	29	29
Delaware	20	18	13	10	6	6	5	5	4	4	4	4
Wash. D.C.	19	11	5	2	1	1	0	0	0	0	0	0
Florida	140	180	142	96	68	62	61	58	54	48	45	39
Georgia	150	199	132	98	78	75	71	63	68	64	64	64
Hawaii	–	–	26	18	13	10	10	9	8	7	7	7
Idaho	22	30	20	17	15	15	15	14	14	14	14	14
Illinois	366	326	192	112	80	70	69	65	58	54	53	48
Indiana	154	177	112	82	64	57	51	51	57	45	43	40
Iowa	130	136	80	42	29	29	28	29	23	21	22	21
Kansas	95	105	62	38	30	28	29	29	27	26	23	22
Kentucky	103	126	85	62	52	47	45	43	41	38	36	35
Louisiana	85	114	75	54	46	42	41	43	41	39	38	29
Maine	62	66	51	28	20	19	18	17	17	16	15	16
Maryland	71	80	48	36	36	36	35	32	33	35	35	30
Massachusetts	226	222	133	85	70	69	63	62	60	52	40	41
Michigan	150	169	110	84	67	64	64	56	55	53	49	50
Minnesota	125	134	99	60	47	48	49	48	44	39	38	39
Mississippi	101	118	96	66	46	42	44	40	34	31	31	29
Missouri	190	190	109	77	61	55	51	48	45	43	39	36
Montana	31	37	32	25	20	21	19	18	18	18	18	18
Nebraska	78	84	54	31	26	25	25	26	24	24	24	21
Nevada	13	16	12	11	11	10	10	10	10	10	8	8
New Hampshire	34	35	21	15	10	9	11	11	11	9	9	8
New Jersey	225	205	139	91	55	52	46	45	39	37	37	36
New Mexico	33	40	31	27	22	22	19	22	19	19	17	15
New York	514	433	278	171	141	129	116	106	105	99	97	91
North Carolina	171	194	131	114	85	82	87	78	79	76	73	73
North Dakota	24	29	18	13	11	11	12	9	9	9	9	9
Ohio	248	271	172	110	84	82	78	75	70	70	66	63
Oklahoma	106	139	90	52	44	44	42	38	34	34	31	28
Oregon	42	68	48	35	31	27	27	30	27	25	24	25
Pennsylvania	534	508	357	234	171	150	139	130	131	125	116	105
Rhode Island	52	50	33	19	14	13	13	11	11	10	9	9
South Carolina	86	116	85	63	45	42	43	33	36	31	31	30
South Dakota	29	31	23	11	10	10	10	10	10	9	9	8
Tennessee	113	146	100	77	62	60	60	55	53	50	47	44
Texas	375	419	283	198	163	148	147	136	132	130	122	109
Utah	30	39	29	25	21	21	22	20	19	19	15	15
Vermont	20	25	14	10	6	6	5	6	5	5	6	5
Virginia	117	136	100	65	51	52	49	46	42	39	40	39
Washington	59	85	58	35	30	32	34	34	32	28	26	26
West Virginia	88	106	72	51	37	36	35	36	29	28	28	26
Wisconsin	224	239	169	111	92	86	85	73	73	66	64	63
Wyoming	20	20	18	10	9	9	9	7	8	7	6	5
TOTAL	**6118**	**6662**	**4519**	**3054**	**2613**	**2246**	**2174**	**2042**	**1960**	**1841**	**1745**	**1661**

Source: National Soft Drink Association
Beverage Industry 1984 **Annual Manual**

NSDA study: gallonage up 2.7%, dollar value, 5.7%

Total soft drink gallonage was up 2.7% in 1982 over '81, according to preliminary figures from the National Soft Drink Association's latest survey.

Based on a poll with 307 plants reporting, the survey offers a detailed look at the industry nationally and regionally.

In 1982, unit sales were up 2.4%, bulk 4.7% and packaged 2.4%. Dollar value increased 5.7% with a wholesale value of $21,156,140,000.

The survey reported total sales of 4,065,815,000 cases.

In bulk, pre-mix was up 2.4% and post-mix 5.2%. In packaged, plastic jumped 9.8%, cans 3.6% and one-way glass 6.5%, but refillable glass was off 6.5%.

Glass sales break down by size this way. For one-ways, 6-9 oz. up 11.8%, 24-32 oz. (1-L) down 16.6% and 48-64 oz. (2-L) up 9.5%.

For refillables, 6-9 oz. was off 19.8%, 12 oz. off 16.6%, 16 oz. up 1%, 24-32 oz. off 17.7% and 48-64 oz. off 37%.

By market share, bulk has 22.7% while packaged is at 77.3%. Of the bulk category, 16.6% is pre-mix and 83.4% is post-mix.

In the packaged category, cans lead with 36.5%, glass refillables have 26.4%, plastic 21.4% and glass one-ways 15.7%.

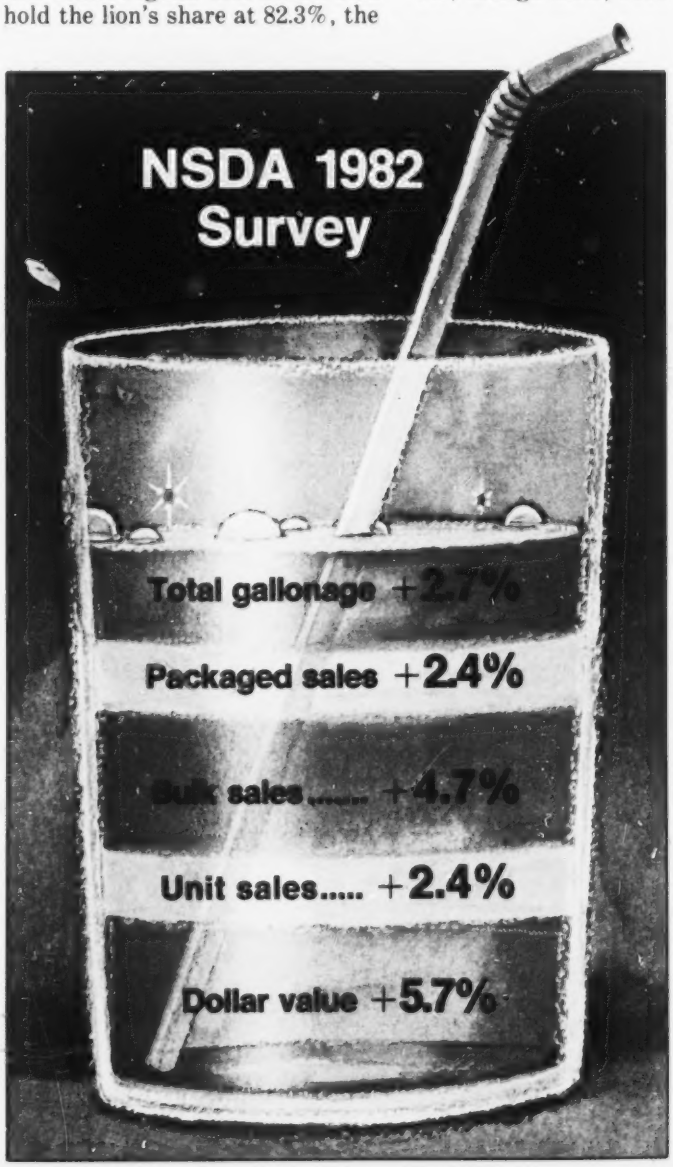
The 2-L size continues to be by far the most popular size in the plastics market with a 93.3% share, 4.4% are 1-L and 2.4% are 1/2-L.

The 16-oz. glass bottle remains the most popular in glass with 55.2% of the one-way market, 64.4% of the refillable market. The 12-oz. size has 29.2% of the one-way share, 13.5% of the refillables. The 48 to 64-oz. size has 9.5% of the one-ways and .2% of the refillable.

The 24 to 32-oz. size has 5.3% of the one-way market, 19.7% refillable. The 6 to 9-oz. size, 7% one-way and 2.3% refillable.

The survey reported that diet soft drinks are continuing to grab a larger share of the overall market. While regular soft drinks still hold the lion's share at 82.3%, the diet segment has grown from 15% in 1981 to 17.7% last year.

In the regular category, colas lead the way with 59.6% market share, with lemon-lime next at 11.2%, followed by pepper-type 6%, orange 5.1%, root beer 2.8%,



NSDA production and consumption of soft drinks

Year	Total Value $ (Wholesale)	Total Cases (288 ounce)	Per capita (12 oz. containers)
1849	760,00	1,013,300	1.1
1859	1,415,000	1,886,700	1.5
1869	4,222,000	5,629,300	4.3
1879	4,742,000	6,332,700	3.0
1889	14,354,000	17,398,800	6.6
1899	23,269,000	25,854,450	8.1
1909	43,508,000	41,436,200	10.8
1919	135,341,000	112,784,100	25.6
1929	214,322,238	181,618,990	35.4
1939	316,690,917	321,997,120	59.1
1945	584,994,000	487,495,000	88.6
1946	617,168,000	514,307,200	88.2
1947	745,676,000	601,109,300	100.6
1948	835,157,300	673,242,500	109.6
1949	860,959,300	675,262,200	108.0
1950	876,532,600	667,834,300	105.3
1951	939,442,500	695,883,300	108.5
1952	1,019,295,000	755,033,300	116.0
1953	1,089,513,000	785,234,700	118.3
1954	1,166,605,000	784,449,300	116.1
1955	1,252,276,000	843,283,300	122.8
1956	1,308,000,000	880,809,300	125.9
1957	1,347,241,500	907,233,300	126.1
1958	1,427,463,500	906,326,000	124.3
1959	1,633,015,900	989,706,700	133.2
1960	1,698,025,600	984,362,700	128.0
1961	1,829,083,200	1,016,157,300	132.2
1962	2,001,016,800	1,111,676,000	142.3
1963	2,341,189,000	1,200,601,000	151.6
1964	2,533,167,000	1,299,060,000	161.9
1965	2,735,567,000	1,402,854,700	172.7
1966	3,175,980,000	1,568,391,300	191.3
1967	3,458,632,000	1,646,968,000	198.7
1968	4,165,552,000	1,851,356,700	221.1
1969	4,369,664,000	1,942,073,300	229.6
1970	4,799,784,000	2,064,423,300	241.9
1971	5,346,960,000	2,235,743,300	258.7
1972	5,683,820,000	2,360,944,700	270.9
1973	6,223,156,500	2,514,406,700	286.4
1974	7,827,131,000	2,532,007,300	286.3
1975	9,397,797,600	2,610,499,300	292.7
1976	10,375,167,000	2,952,474,700	328.7
1977	11,526,810,000	3,247,722,000	359.0
1978	13,344,588,000	3,490,000,000	382.7
1979	14,872,628,000	3,664,300,000	399.6
1980	17,676,648 000	3,816,575,000	409.6
1981	20,015,269,000	3,959,697,000	412.3
1982	**21,156,140,000**	**4,085,815,000**	**416.5**

Note: 1981 Resident Population 230,508,000 U.S. Department of Commerce, Bureau of the Census. For purposes of the report, all soft drink sales are converted to gallons and expressed in cases of 24 12-oz. containers. Prior to 1977 the standard case was 24 8-oz. containers. The change has been made to more accurately reflect the average size container.

grape 1.7% and ginger ale 1.5%.

In the diet group, colas have 63.3% of the market, lemon-lime 14% and all others 22.7%.

Supermarkets continue to be the most common retail outlet for soft drinks with 46.6% of the soft drinks sold. Convenience stores follow with 19.4%, vending machines 17.3% and other retail outlets with 16.7%.

Regionally, the Northwest had the most successful year with gallonage up 7.7%, units 7.5%, bulk 6.7%, packaged 7.9% and dollar value 16.6%.

The Pacific and the Northeast had off-years. The Northeast was down in dollar value .2% while every other region of the country was up.

The Pacific was down .4% in gallonage, .2% in units, 1.5% in packaged sales, but up slightly in dollar and bulk sales.

In the Pacific region, every size glass refillable and one-way was down, except for the 12-oz. one-ways, which rose 5.8%.

Complete and final figures for the survey were to be released by the NSDA in August.

There were a few interesting regional sidelights. In the Southern region, 48 to 64-oz. glass one-ways increased 37.8%, but refillables were down 69.8%.

Glass one-ways in the 24 to 32-oz. size were down 38.8% and 48 to 64-oz. refillables were off 40% in the West Central region.

Glass refillables in the 48 to 64-oz. size were down 31.3% in the Northeastern region.

Glass one-ways in the 6 to 9-oz. size were down 39.6% and glass refillables in the 16-oz size were off 32:8% in the Southwestern region.

One-ways in the 6 to 9-oz. size in the Western region were also off by 73.9%, but glass one-ways in the 16-oz. size were up 103%.□

Regional breakdown

Here's how the National Soft Drink Association breaks down the regions:

Northeastern—Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.

Southern—Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North and South Carolina, Tennessee, Virginia.

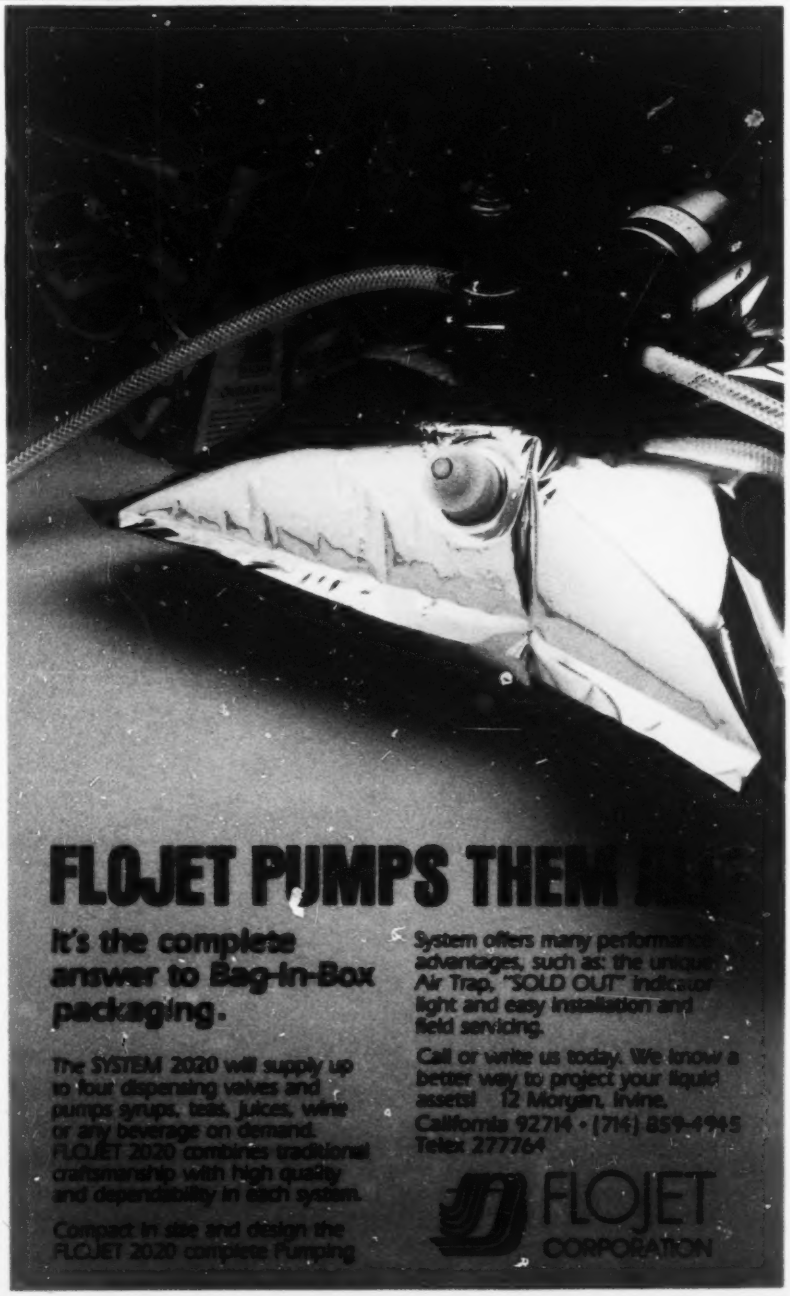
East Central—Illinois, Indiana, Kentucky, Michigan, Ohio, West Virginia, Wisconsin.

Western—Colorado, Idaho, Montana, Nevada, Utah, Wyoming.

Southwestern—Arizona, New Mexico, Oklahoma, Texas.

West Central—Iowa, Kansas, Minnesota, Missouri, Nebraska, North and South Dakota.

Pacific—Alaska, California, Hawaii, Oregon and Washington.


FLOJET PUMPS THEM
It's the complete answer to Bag-In-Box packaging.
The SYSTEM 2020 will supply up to four dispensing valves and pumps syrups, teas, juices, wine or any beverage on demand. FLOJET 2020 combines traditional craftsmanship with high quality and dependability in each system.
Compact in size and design the FLOJET 2020 complete Pumping System offers many performance advantages, such as: the unique Air Trap, "SOLD OUT" indicator light and easy installation and field servicing.
Call or write us today. We know a better way to project your liquid assets! 12 Morgan, Irvine, California 92714 • (714) 859-4945 Telex 277764
FLOJET CORPORATION
Circle No. 132 on Reader Service Card

Beer industry is up a scant .4% in '82

Year-end figures for the beer industry show that domestic production was up a scant 200,000 barrels in 1982 over 1981. Adding imports—one of the few growth areas—total industry sales were only up 800,000 barrels, an increase of .4%.

Reduced calorie beers, lights, were also one of the bright spots during the year. This segment went from 13.8% of the market in 1981 to 17.4% in 1982. As far as individual companies, Anheuser-Busch, up 8%, and Heileman, up 3.6%, were the only brewers to show gains.

According to **BI**s John Maxwell, director of research/statistics, the 1982 economy was a factor, "but the rate of increase in beer consumption has been slipping for years and demographics are also becoming rather adverse."

Furthermore, Maxwell projects that 1983 volume will also be flat. He has estimated that per capita consumption in 1985 will be 25.2 gal., an increase of only .6 of a gallon over 1982's 24.6.

Slowdowns in the growth rate of virtually all alcoholic beverages are anticipated. Maxwell, who has been tracking these industries for some 25 years, identifies several factors which are adversely affecting these drinks: lifestyles, government, and demographics.

"Lifestyle is moving increasingly away from alcoholic beverages and into such areas as soft drinks and bottled water. You can see it in your own home; at a cocktail party the guy who used to knock off a bottle of bourbon is now walking around with a soft drink in his hand," he comments.

Increasingly, he says, consumers are becoming more health conscious and this will have adverse ramifications not only for alcohol-

Brewers' production

(Mil. bbls.)

	1976	1977	1978	1979	1980	1981	1982E	Year-end Capacity 1982E
Anheuser-Busch	29.1	36.6	41.6	46.2	50.2	54.5	59.0	65.0
Miller	18.4	24.2	31.3	35.8	37.2	40.3	39.9	44.0
Stroh (a)	35.1	32.9	29.8	26.4	24.8	23.4	23.3	30.0
Heileman (b)	9.6	10.6	10.5	11.3(f)	13.3	14.0	14.5	17.0
Pabst	17.0	16.0	15.4	15.1	15.1	13.5	12.5	17.5
Coors	13.5	12.8	12.6	12.9	13.8	13.3	12.0	15.0
Olympia (c)	7.3	6.8	6.7	6.0	6.1	5.7	5.2	9.0
Genesee	2.5	2.8	3.0	3.4	3.6	3.6	3.4	4.0
Schmidt	3.5	3.5(d)	3.8	3.8	3.6	3.2	3.2	4.3
General	4.2	4.2	3.5(e)	3.0	2.6	2.1	1.8	8.8
Pittsburgh	0.8	0.7	0.6	0.7	1.0	0.9(g)	1.0	1.2
All Others	11.2	8.1	6.5	9.9	5.2	4.7	3.6	5.1
Subtotal	**152.2**	**159.2**	**165.3**	**170.7**	**176.5**	**179.2**	**179.4**	**220.9**
Less Tax-free Exports and Military	1.8	2.3	2.6	2.6	3.1	2.5	2.4	
Subtotal	**150.4**	**156.9**	**162.7**	**168.1**	**173.4**	**176.7**	**177.0**	
Imports	2.4	2.5	3.5	4.4	4.6	5.2	5.7	
Consumption (Total)	**152.8**	**157.1**	**165.7**	**172.5**	**178.0**	**181.9**	**182.7**	

(a) Schaefer & Stroh combined for all years; Schlitz is now part of Stroh.
(b) Includes Carling National for all periods except first three months of 1979.
(c) Includes certain assets of Hamm's acquired March 1975, and pro forma for Lone Star for all years. Pabst now owns 49% of the stock.
(d) Includes Rheingold as of December; Rheingold's previous volume included in All Others.
(e) Pro forma for Pearl acquisition in January 1978.
(f) Includes Blitz.
(g) Strikes in August-September 1972 and May 1981.
Source: Lehman Brothers Kuhn Loeb Research

Copyright: Beverage Industry and John Maxwell January 28, 1983

Production by brand

(Mil. bbls.)

	1977	1978	1979	1980	1981	1982E
Anheuser-Busch						
Budweiser	25.0	27.0	30.0	33.9	37.8	39.6
Michelob	6.2	7.5	8.0	8.5	8.5	8.5
Busch	3.4	3.6	3.2	2.8	3.1	3.3
Michelob Light	—	1.0	2.0	2.6	3.2	3.2
Bud Light	—	—	—	—	—	3.1
Natural Light	1.9	2.5	3.0	2.4	1.9	1.3
Other	—	—	—	—	—	—
Total	**36.5**	**41.6**	**46.2**	**50.2**	**54.5**	**59.0**
Miller						
High Life	16.5	20.8	23.6	22.7	22.3	20.5
Lite	7.5	9.5	11.2	13.2	16.3	17.5
Lowenbrau	0.2	1.0	0.9	1.2	1.5	1.5
Other	—	—	0.1	0.1	0.3	0.4
Total	**24.2**	**31.3**	**35.8**	**37.2**	**40.3**	**39.9**
Stroh						
Stroh				5.7	5.5	5.4
Schaefer				3.5	3.0	2.6
Stroh Light				0.5	0.6	0.7
Goebel					—	0.4
Total	**10.2**	**9.6**	**9.8**	**9.1**	**9.1**	
Old Milwaukee	3.6	3.7	4.2	5.1	6.0	
Schlitz	13.0	10.5	7.5	5.7	4.2	
Schlitz Malt	1.8	1.9	2.3	2.5	2.6	
Old Milwaukee Light	—	—	—	—	0.8	
Schlitz Light	0.8	0.6	0.4	0.3	0.4	
Erlanger	—	—	0.4	0.6	0.1	
Other	0.4	0.1	0.2	0.2	0.1	
Total	**19.6**	**16.8**	**15.0**	**14.3**	**14.2**	
Grand Total	29.8	26.4	24.8	23.4	23.3	
Heilman*						
Old Style (Including Old Style Light and Export)				4.8	5.4	5.6
Blatz (Including Blatz Light)				1.3	1.5	1.7
Carling Black Label (Including Light)				.8	1.0	1.6
Colt 45				1.1	1.2	1.5
Schmidt/Raiher				1.6	1.7	2.0
All Others				3.4	3.2	2.1
Total				**13.0**	**14.0**	**14.5**
Pabst						
Pabst		12.7	12.3	11.2	9.6	8.8
Red, White & Blue		0.5	0.9	1.2	1.3	1.0
Olde English (Malt)		0.5	0.7	1.0	1.1	0.9
Blitz		0.3	0.5	0.8	0.5	0.6
Pabst Light		0.6	0.7	0.6	0.5	0.5
Jacob Best		—	—	—	—	0.4
Andeker		—	—	—	0.1	0.1
Other		0.8	—	0.3	0.3	0.2
Total		**15.4**	**15.1**	**15.1**	**13.4**	**12.5**
Coors						
Coors		12.1	11.3	11.4	11.2	9.1
Coors Light		0.5	1.6	2.4	2.0	2.8
Others		—	—	—	0.2	0.1
Total		**12.6**	**12.9**	**13.8**	**13.3**	**12.0**

*Revised

Source: Lehman Brothers Kuhn Loeb Research

Copyright: Beverage Industry and John Maxwell
January 28, 1983

Table 1: Alcoholic beverage wholesalers by category

(1948 – 1982)

Year	Beer	Wholesalers wine & spirits	Total
1982 (P)	4,551	1,972	6,523
1981	4,637	1,964	6,601
1980	4,713	1,920	6,633
1977	4,836	1,704	6,540
1972	5,114	1,751	6,865
1967	5,472	1,706	7,178
1963	5,788	1,701	7,489
1958	6,020	1,669	7,689
1954	5,904	1,662	7,566
1948	5,401	1,553	6,954

P = Preliminary

Source: Beverage Marketing Corporation, U.S. Department of Commerce, Census of Wholesalers

Copyright: Beverage Industry and Beverage Marketing Corp., January 28, 1983

Table 2: Alcoholic beverage producers market share—top 3 companies (1965 – 1981)

Year	Breweries (a)	Wineries (b)	Distilleries (c)
1981	59.9%	42.0%	35.0%
1980	58.6	43.2	36.0
1979	58.2	44.1	39.4
1978	56.8	43.7	—
1977	52.9	47.0	—
1976	48.1	47.0	—
1975	48.1	47.7	35.3
1974	46.3	47.0	—
1972	38.9	50.0	—
1970	34.6	50.0	33.0
1965	24.1	—	31.0

(a) Anheuser-Busch, Miller, Schlitz (b) Gallo, United Vintners, Almaden (c) Seagrams, Heublein, National Distillers

Source: Beverage Marketing Corporation; U.S. Brewers Association; Distilled Spirits Council; Impact; Wine Institute

Copyright: Beverage Industry and Beverage Marketing Corp., January 28, 1983

Table 3: Alcoholic beverage producers, by type

(1948 – 1982)

Year	Breweries*	Wineries (bonded wine cellars)	Distilled spirits producers
1982 (P)	105	1,050	107
1981	104	1,021	110
1980	101	920	113
1977	95	703	96
1972	139	464	121
1967	176	428	150
1963	211	445	164
1958	252	527	193
1954	310	601	223
1948	466	798	300

P = Preliminary

*These are producing plants; there are actually 44 operating companies in the U.S.

Source: Beverage Marketing Corp.; BATF

Copyright: Beverage Industry and Beverage Marketing Corp., January 28, 1983

Table 4: Multiple alcoholic beverage wholesalers (1963 – 1982)

Year	Beer Only	Wine & Spirits Only	Beer, Wine & Spirits	Total
1982 (P)	3,441	862	1,110	6,523
1981	3,561	888	1,076	6,601
1980	3,693	900	1,020	6,633
1977	3,998	866	838	6,540
1972	4,347	984	767	6,865
1967	4,773	1,007	699	7,178
1963	5,126	1,039	662	7,489

P = Preliminary

Source: Beverage Marketing Corporation; U.S. Department of Commerce, Census of Wholesalers

Copyright: Beverage Industry and Beverage Marketing Corp., January 28, 1983

Market breakdown by product

(Mil. bbls. and % shares)

	Super Premium		Premium		Light		Popular		Malt Liquor		Imported		Total
1981	11.2	6.2%	94.4	51.9%	25.1	13.8%	39.9	21.9%	6.1	3.4%	5.2	2.8%	181.9
1982E	11.9	6.5	89.5	49.0	31.8	17.4	37.8	20.7	6.1	3.3	5.7	3.1	182.7

Source: Lehman Brothers Kuhn Loeb Research

Copyright: Beverage Industry and John Maxwell January 28, 1983

ic beverages but for such items as sugar and salt. "The increases in light beer volume and the growth of noncaloric soft drinks both are dramatic examples of this shift in lifestyles and its impact on consumption," he comments.

A growing awareness of alcohol abuse is also adversely affecting consumption. Drunken driving laws are being tightened and Alcoholics Anonymous membership is at its highest enrollment level ever.

Pointing to high levels of taxation in foreign countries (some alcoholic beverages now sell at the U.S. equivalent of $50 in Scandinavian countries), Maxwell anticipates that the U.S. government will find this an excellent way to balance the budget " ... and we will see further increases in excise taxes on wine, beer, liquor and gas.

"Higher prices will definitely affect sales unless there is an immediate dramatic shift in economic conditions," Maxwell comments.

The beer industry also has an added problem of having a small consumption base. About 25% of the drinking population consumes 70% to 80% of the product. These

Table 5: U.S. beer wholesaler establishments ranked by sales size (1981)

Sales Range	Number	Cumulative number	% of total	Cumulative %
$50 Million or more	7	7	0.2%	0.2%
$25 to $50 Million	42	49	0.9	1.1
$10 to $25 Million	286	335	6.2	7.3
$5 to $10 Million	473	808	10.2	17.5
$3 to $5 Million	689	1,497	14.8	32.3
$2 to $3 Million	1,113	2,610	24.0	56.3
$1 to $2 Million	1,076	3,686	23.2	79.5
$500,000 to $1 Million	685	4,371	14.8	94.3
Less than $500,000(*)	266	4,637	5.7	100.0
Total	**4,637**		**100.0%**	

(*) Includes 2 unclassified companies

Source: Beverage Marketing Corporation

Copyright: Beverage Industry and Beverage Marketing Corp., January 28, 1983

Table 7: Comparison of 1980 and 1981 U.S. beer wholesaler establishments

Sales Size	1980	1981	Change	% Change
$50 Million or more	8	7	−(1)	−(12.5)%
$25 to $50 Million	28	42	14	50.0
$10 to $25 Million	258	286	28	10.9
$5 to $10 Million	466	473	7	1.5
$3 to $5 Million	681	689	8	1.2
$2 to $3 Million	1,112	1,113	1	—
$1 to $2 Million	1,035	1,076	41	3.9
$500,000 to $1 Million	829	685	−(144)	−(17.4)
Under $500,000 (*)	297	266	−(31)	−(10.4)
Total	**4,714**	**4,637**	**−(77)**	**−(1.6)%**

(*) Includes 2 unclassified companies in 1981 and 20 in 1980.

Source: Beverage Marketing Corporation

Copyright: Beverage Industry and Beverage Marketing Corp., January 28, 1983

Table 6: Beer wholesalers sales concentration (1981)

	Establishments			Sales Volume		
Sales Ranges	Number	Cum. No.	Cum. %	Amount (000)	Cum. Amt. (000)	Cum. %
$50 Million or more	7	7	0.2%	$ 385,000	$ 385,000	2.1%
$25 to $50 Million	42	49	1.1	1,575,000	1,960,000	10.7
$10 to $25 Million	286	335	7.2	5,005,000	6,965,000	38.2
$5 to $10 Million	473	808	17.4	3,547,500	10,512,000	57.6
$3 to $5 Million	689	1,497	32.3	2,756,000	13,268,500	72.7
$2 to $3 Million	1,113	2,610	56.3	2,782,500	16,051,000	88.0
$1 to $2 Million	1,076	3,686	79.5	1,614,000	17,665,000	96.8
$500,000 to $1 Million	685	4,371	94.3	513,750	18,178,750	99.6
Under $500,000 (*)	266	4,637	100.0	66,500	18,245,250	100.0
Total	**4,637**			**$18,245,250**		

(*) Includes 2 unclassified companies

Source: Beverage Marketing Corporation

Copyright: Beverage Industry and Beverage Marketing Corp., January 28, 1983

Table 8: Primary brand beer wholesaler sales analysis (1981)

Sales Size	Anheuser-Busch No.	%	Miller No.	%	Stroh/ Schlitz/ Schaefer No.	%	Pabst/ Olympia No.	%	Coors No.	%
$50 Million or More	4	0.4	1	0.1	—	—	—	—	1	0.4
$25 to $50 Million	17	1.6	15	1.7	7	0.8	—	—	2	0.8
$10 to $25 Million	86	8.0	103	11.8	34	3.8	25	3.9	18	7.2
$5 to $10 Million	128	11.9	113	12.9	99	11.0	59	9.3	20	8.0
$3 to $5 Million	180	16.8	147	16.8	129	14.4	97	15.3	38	15.3
$2 to $3 Million	230	21.4	230	26.3	234	26.1	160	25.3	78	31.3
Subtotal—Over $2 Mil.	645	60.1%	609	69.6%	503	56.1%	341	53.8%	157	63.0%
$1 to $2 Million	226	21.0	157	17.9	229	25.5	169	26.7	59	23.7
$500,000 to $1 Million	165	15.4	87	9.9	119	13.3	86	13.6	27	10.9
Less than $500,000	38	3.5	23	2.6	46	5.1	37	5.9	6	2.4
Subtotal—Under $2 Mil.	429	39.9%	267	30.4%	394	43.9%	292	46.2%	92	37.0%
Total	**1,074**	**00.0%**	**876**	**100.0%**	**897**	**100.0%**	**633**	**100.0%**	**249**	**100.0%**

Source: Beverage Marketing Corporation

Copyright: Beverage Industry and Beverage Marketing Corp. January 28, 1983

Table 10: Projected beer wholesaler establishments ranked by sales size (1981-1990)

Sales Range	1981	1990	Change Amount	Change %	1990 Cum. % of total
$50 Million or more	7	50	43	614.3%	1.3%
$25 to 50 Million	42	300	258	614.3%	9.3
$10 to 25 Million	286	500	214	74.8	22.6
$5 to 10 Million	473	1,000	527	114.2	49.3
$3 to 5 Million	689	1,100	411	59.2	78.6
$2 to $3 Million	1,113	550	−(563)	−(50.6)	93.3
Under $2 Million	2,027	250	−(1,777)	−(87.7)	100.0
Total	**4,637**	**3,750**	**−(887)**	**−(19.1)%**	

Source: Beverage Marketing Corporation

Copyright: Beverage Industry and Beverage Marketing Corp. January 28, 1983

Table 11: Projected beer wholesaler sales concentration (1990)

Sales Range	Projected Number of Establishments	Estimated Wholesaler Sales Volume Amount (Millions)	Cum. Amount (Millions)	Cum. %
$50 Million or more	50	$ 2,875	$ 2,875	7.9%
$25 to $50 Million	300	11,250	14,125	38.8
$10 to $25 Million	500	8,750	22,875	62.8
$5 to $10 Million	1,000	7,500	30,375	83.4
$3 to $5 Million	1,110	4,400	34,775	95.5
$2 to $3 Million	550	1,375	36,150	99.3
Under $2 Million	250	250	36,400	100.0
Total	**3,750**	**$36,400**		

Source: Beverage Marketing Corporation

Copyright: Beverage Industry and Beverage Marketing Corp. January 28, 1983

consumers are primarily in the teens through early 30s. Considering the fact that this segment is declining and that the "war baby boom" group are now in the 35-36 age range, the industry is also facing a demographic challenge.

Growth in the light segment reflects virtually all of these factors. These low-caloric beers have growth from a 2% market share in 1975 to a 17.4% share in 1982.

Meanwhile popular-priced brews have declined from 43% in 1975 to 20.7% in 1982 and are projected to decline to 10% by 1985. Premium and super premium had a combined market share of 51% in 1975. By 1982 that share had grown to 55.5%.

Market share of import continues to rise, but at a very slow rate. 1982's estimated share is 3.1%.

Simmons Market Data:

Index of Beer Drinkers

Total Adults	100
Males	131
Females	72
18-24	121
25-34	120
35-44	108
45-54	95
55-64	80
65 or Older	59

All Others No.	%	Total U.S. No.	%
—	—	7	0.2
1	0.2	42	0.9
9	1.9	286	6.2
24	5.1	473	10.2
43	9.1	689	14.8
89	18.4	1,113	24.0
164	34.7%	2,160	56.3%
127	26.8	1,076	23.2
105	22.2	685	14.8
77	16.3	266	5.7
309	65.3%	2,027	43.7%
473	**100.0%**	**4,637**	**100.0%**

The top ten beers: Schlitz drops, Old Milwaukee jumps

There were no major shifts among the top six beer brands in 1982. Budweiser remains in the number one position and has strengthened its lead moving from a market share of 20.6% to 21.6%.

Miller High Life, number two, dropped in both market share and consumption to 11.2% and 20.5 million gallons. Miller Lite gained a full half-point market share to 9.5% and retains the number three spot.

The race for the number four slot—between incumbent Coors and Pabst—has tightened. Last year there was a full percentage point—four million barrels—between the two. In 1982 Coors' share lead is by only one-tenth of a percentage point, approximately 300,000 barrels.

Michelob, number six, is not far behind with its 4.6% market share and 8.5 million barrel volume.

Old Milwaukee jumped from tenth to seventh on the rankings, moving from a 2.7% market share to 3.2% in 1982. Schlitz, number seven in 1981 replaced Old Milwaukee in the number ten position. The brand dropped .8 of a percentage point.

Old Style, number eight, and Stroh, number nine, were relatively unchanged.

Table 9: Beer wholesaler establishments

Year	Number	Annual Change	Average Annual Growth Rate
1990	3,750	−(100)	−(2.3)
1986	4,150	−(100)	−(2.1)
1982	4,551	−(86)	−(1.9)
1981	4,637	−(76)	−(1.6)
1980	4,713	−(41)	−(1.2)
1977	4,836	−(56)	−(1.1)
1972	5,114	−(72)	−(1.3)
1967	5,472	−(79)	−(1.3)
1963	5,788	—	

Source: Beverage Marketing Corporation

Copyright: Beverage Industry and Beverage Marketing Corp. January 28, 1983

Brewers' estimated market shares

	1979	1980	1981	1982E
Anheuser-Busch	26.8%	28.2%	30.0%	32.3%
Miller	20.8	20.9	22.2	21.8
Stroh	15.3	13.9	12.9	12.8
Heileman	6.6	7.5	7.7	7.9
Pabst	8.8	8.5	7.4	6.8
Coors	7.5	7.8	7.3	6.6
Olympia	3.5	3.4	3.1	2.8
Genesee	2.0	2.0	2.0	1.9
Schmidt	2.2	2.0	1.6	1.8
General	1.7	1.4	1.2	1.0
Pittsburgh	0.4	0.6	0.5	0.5
Others* (Net)	4.4	3.8	4.1	3.8
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

*Includes imports and excludes tax-free.

Source: Lehman Brothers Kuhn Loeb Research

Copyright: Beverage Industry and John Maxwell January 28, 1983

1982 Top Ten Beer Brands

Rank	Brand	Market share	Production*
1	Budweiser	21.6	39.6
2	Miller High Life	11.2	20.5
3	Miller Lite	9.5	17.5
4	Coors	4.9	9.1
5	Pabst	4.8	8.8
6	Michelob	4.6	8.5
7	Old Milwaukee	3.2	6.0
8	Old Style	3.1	5.6
9	Stroh	2.9	5.4
10	Schlitz	2.3	4.2

*millions of barrels

Source: Lehman Brothers Kuhn Loeb Research

Copyright: Beverage Industry and John Maxwell January 28, 1983

'82 beer imports show 10.3% volume increase

In 1982, the imported beer industry volume grew 10.3% over '81. Heineken retained its number one position by a wide margin with 38.5% of the market, representing volume increase of 9.2% over 1981, according to John C. Maxwell, **Beverage Industry's** director of research/statistics.

Molson was in second place with a 17.9% market share, followed by Becks with 7.9%. During 1982 imports accounted for 3.2% of the total U.S. beer market.

European brands also enjoyed strong growth last year, Maxwell reported, aided significantly by the strength of the dollar overseas, while some of the Mexican brands experienced declines. A further adverse effect on Mexican imports, Maxwell believes, may be evidenced since their duty-free status into the U.S. has ended and legal suit has been brought against President Reagan. This could cause prices at the retail level to increase sharply, Maxwell says.

Imported beer is one of the fastest-growing segments of the brewing industry, along with the light and upper-premium sectors, according to Maxwell's research. Import sales are growing at a "healthy" rate of 6-10% per year and have quadrupled since 1975. Maxwell anticipates strong growth will continue in this segment of the industry throughout the 1980's.

Advertising expenditures have increased significantly, he says, and should continue to do so as importers actively vie for a larger share of the American beer marketplace.

This healthy growth rate should be the result of several factors, including the change in the image of beer as "the working man's drink and its social acceptance by the white-collar class," according to Maxwell's report.

"There are now enough varieties of imports on the market to satisfy the most discriminating of connoisseurs. Another plus for imported beer is the increasing movement away from distilled spirits," he concludes. □

Leading imported beer brands

(Mil. gallons and pct. of market)

	1980		1981		1982		*
Heineken	53.5	37.3%	62.9	38.9%	68.7	38.5%	9.2 %
Molson	31.7	22.4	32.0	19.8	32.0	17.9	–
Becks	7.3	5.2	10.0	6.2	14.0	7.9	40.0
Moosehead	5.6	4.0	7.9	4.9	11.2	6.3	41.8
Dos Equis	7.0	4.9	7.0	4.3	10.5	5.9	50.0
Labatt	6.9	4.9	9.0	5.6	9.5	5.3	5.6
St. Pauli Girl	2.4	1.7	3.0	1.9	4.5#	2.5	50.0
Guinness Harp	1.7	1.2	3.9	2.4	4.1	2.3	5.1
Carling O'Keefe	–	–	4.5	2.8	4.0	2.2	(11.1)
Tecate	–	–	3.8	2.3	2.7	1.5	(28.9)
Foster	1.6	1.1	1.7	1.1	1.7	1.0	–
Grolech	1.6	1.1	1.8	1.1	1.5	0.9	(16.7)
Kronenbourg	0.7	0.5	1.2	0.7	1.4	0.8	16.7
San Miguel	–	–	1.1	0.7	1.4	0.8	27.3
Carta Bianca	2.1	1.5	2.3	1.4	1.3	0.7	(43.5)
Kirin	–	–	1.4	0.9	1.3	0.7	(7.1)
Bass ale	0.9	1.1	1.0	0.6	1.1	0.6	10.0
Amstel Light	0.5	0.3	0.7	0.4	1.1	0.6	57.1
Tsingtao	0.4	0.3	0.8	0.5	1.0	0.6	25.0
Bohemian	–	–	0.7	0.4	0.8	0.4	14.3
Carlsburg	–	–	–	–	0.7	0.4	–
DAB	–	–	–	–	0.7	0.4	–
Kalback	–	–	0.1	0.1	0.1	0.1	–
Others	17.0	12.0	5.0	3.0	3.1	1.7	(38.0)
Total	141.6	100.0%	161.8	100.0%	178.4	100.0%	10.3 %

* Volume change, 1981-82.
# Adversely affected by 2½ month strike in summer of 1982.

Source: Lehman Brothers Kuhn Loeb Research

Copyright: John Maxwell, Beverage Industry June 10, 1983

cause of the increasing number of fast food outlets with fountain service and the growing number of states which have passed mandatory deposit laws.

Stupay also foresees the development of a bulk dispensing unit for the home, which could also contribute to the competition for package share by glass, plastic and cans.

But what about the package itself? "The package of the future will be lighter, probably flexible or semi-rigid, and readily recyclable or easily crumpled and made bio- or photodegradable," Stupay told his audience.

He believes this new packaging could reduce beverage production costs because various freight and handling costs from the package supplier to the bottling plant will be eliminated. But it's likely that research and development costs will rise in an attempt to reduce obsolete methods. □

Beverage containers only bright spot in 1982 packaging industry picture

The packaging industry has just come off its second unimpressive year in a row. Over-capacity for glass, low operating rates for cans, under-capacity operating utilization rates and high discounting of PET resulted in total volume being flat-to-down in 1982.

Yet, this bleak description of the industry, revealed at the Tenth Annual Container Industry Conference in New York, is not without a rosier projection for the future. Art Stupay, partner at Prescott Ball & Turben, sponsors of the conference, projected all sectors of the container industry would show improved volume growth in 1983 and '84.

While the overall packaging industry remained flat last year, it was not all bad news for the beverage packaging segment.

Soft drink returnables and one-ways combined to show an increase of 1 million gross units, or 2%. This was due, for the most part, to the increased market share captured by Owens-Illinois' Plasti-Shield bottle, according to Stupay. Yet the gain in this segment, along with a 4% increase in unit shipments of glass containers for food, were not enough to off-set the decline in the category as a whole; glass container unit shipments were off 4% and dollar sales were flat.

NR beer shipments were down 10-11% in 1982, after an 8% decline in 1981. The cause for this, said Stupay, was an increase in market share by Anheuser-Busch at the expense of Miller, which built its marketing program on NR glass. Liquor bottle shipments were off 10%; wine bottle shipments were down by 1 million gross.

Stupay predicted, though, that 1983 will be a much better year than last. Many glass manufacturers have trimmed operations and cost. Ball, Dorsey and O-I have closed plants and reduced facilities. A new labor contract and lower number of workers will result in cost increases rising at a much slower rate than a year ago. Stupay also anticipated energy costs and raw materials costs to be moderated, and at the same time, expected the industry to produce at a higher operating rate due to further capacity reduction.

Offsetting this optimistic outlook for the glass industry is Stupay's prediction of further inroads by plastic manufacturers into beverage packaging. The in-

Liquor bottle shipments, by size

	(Glass)	
Million Units (1981)	**Units-Millions**	**% Total**
Under 275 ml	700	31
276-500 ml	285	13
501-800 ml	475	22
801-1,000 ml	500	23
Over 1,000 ml	240	11
Total	**2,200**	**100**

Source: Prescott Ball & Turben

Copyright: Beverage Industry, June 10, 1983

Beverage consumption & packaging in N.Y. State

Mil equiv. 12-oz. Units	**One-Way Glass**	**Cans**
Beer	2,080	1,350
Soft Drinks	936	2,023
Total N.Y. State	**3,016**	**3,373**
National Shipments	29,117	56,326
N.Y. State % National	10.4%	6.0%

Source: Prescott Ball & Turben

Copyright: Beverage Industry, June 10, 1983

Package mix for beer in mandatory deposit states

Two Tier States

	Oregon (Effective 10/72)			Michigan (Effective 12/78)		
Package	**1971**	**1977**	**1981**	**1977**	**1979**	**1981**
Cans	33%	6%	31%	64%	36%	37%
One-way Bottles	19	18	16	14	21	23
Refillables	25	53	29	11	29	23
Draught	23	23	24	11	14	17
Total	100%	100%	100%	100%	100%	100%

Single Tier States

	Vermont (Effective 9/73)			Connecticut 1/80		Iowa (7/79)	
	1970	**1977**	**1981**	**1979**	**1981**	**1979**	**1981**
Cans	39%	28%	25%	33%	31%	65%	58%
One-way Bottles	45	41	51	46	42	13	12
Refillables	10	16	11	7	8	8	8
Draught	6	15	13	14	19	14	22
Total	100%	100%	100%	100%	100%	100%	100%

Source: United States Brewers Association

Copyright: Beverage Industry, June 10, 1983

The economy and packaging

	1979	1980	1981	1982E	1983E
GNP (Trillion)	$ 2.4	$ 2.6	$ 2.9	$ 3.0	$ 3.3
% Packaging	1.7	1.7	1.7	1.7	1.7
Packaging (Billion)	$41.0	$44.5	$49.0	$51.0	$55.0
% Glass	10.9	10.8	10.5	10.0	9.8
% Metal	22.0	21.5	20.6	20.6	20.5
Glass Containers (Bil $)	$4.45	$ 4.8	$ 5.1	$ 5.1	$ 5.4
Glass Volume (Mil. Gross)	323	326	321	308	318
Metal Cans (Bil $)	$ 9.0	$ 9.6	$10.1	$10.5	$11.3
Can Volume (Billion Cans)	89	89	89	90+	92

E-Estimated, P-Projected

Glass container unit sales

(In Million Gross)

End-Use Markets	1978	1979	1980	1981	1982E	1983E
Food	92.6	93.2	89.3	91	95	97
Beer*	106.5	117.7	122.7	116	105	108
Soft Drinks*	61.4	55.0	57.8	60	61	62
Liquor	16.5	15.8	15.8	16	13	15
Wine	8.5	8.5	8.8	9	8	9
Non-Foods	31.8	29.6	29.5	27+	24	25
Export	2.2	2.9	2.2	2	2	2
Total	**319.5**	**322.8**	**326.1**	**321**	**308**	**318**

*Non-returnables and returnables combined.
E-Estimated

Note: Data for 1980 through 1982 have been significantly revised and are still subject to error.

Metal can sales

(Billion cans)

End-Use Markets	1978	1979	1980	1981	1982E	1983E
Food	30.3	30.0	29	29	28	29
Beer	28.9	28.7	29	31	32	33
Soft Drinks	25.5	25.7	26	25	26	26+
Non-Foods	5.1	4.9	5	5	4	5
Total	**89.8**	**89.3**	**89**	**89**	**89-90**	**93+**

P-Projected; E-Estimated

Source: Prescott Ball & Turben

Copyright: Beverage Industry, June 10, 1983

troduction of 1.75-L liquor bottles and larger-sized wine bottles could hurt glass manufacturers, as will the anticipated sale of unpasteurized beer in 3- and 4-L containers. Stupay did not see any significant inroads made with the .5-L PET this year, but a start will certainly be made.

All things considered, Stupay forecasted that glass containers will show a 2%-2½% volume rise in 1983 from its level a year ago. This estimate is based on the assumption GNP will rise a real level of 3%, and the demand for beer, soft drinks, and more cyclical products like liquor, toiletries and cosmetics will increase.

Overall metal can sales were about flat in volume terms last year, with dollar sales up about 4%. Major declines in shipments of cans for non-food were offset by increases in beverage can production. Shipments of beer cans rose 2.7%; soft drink cans rose 3.1%. The increase in soft drink cans, Stupay said, is due to marketing programs featuring 12-pack cans, such as those used in the beer industry. Two-piece cans accounted for nearly all soft drink cans. Aluminum soft drink cans increased by 10%, while two-piece steel cans were off by 3% (from a much lower base).

Aluminum beer can volume rose by 8%, two-piece steel cans dropped precipitously, as A-B and other brewers shifted to aluminum in mandatory deposit states because of its scrap value.

In 1983, Stupay predicts can sales to increase 2-3%. Beer cans are expected to rise with increased consumption resulting from can marketing programs. Sixteen-oz. cans could also boost soft drink demand.

By mid-1983, Stupay anticipated that much can manufacturing overcapacity would be reduced as a number of can lines were removed. As capacity was reduced, prices were expected to rise with metal costs at a modest rate.

The major challenge for can companies in '83, said Stupay, was to increase margins, raise productivity and introduce even lighter weight, cost saving aluminum material.

PET beverage bottle manufacturing enjoyed its heyday in the 1979-81 period, according to Stupay. Volume rose from virtually a zero base in 1977 to 2.4 billion 2-L units in 1982. The problem by last year, though, was that while production was at 2.4 billion units, gross capacity stood at 3.2-3.4 billion, based on the number of bottle forming machines in place. However, assuming that most operators cannot run machines at full capacity and the sustainable operating rate was 85-90%, net capacity was at 2.7-2.9 billion. Combined production of 2-L bottles along with the 200 million 1-L bottles that were produced last year, resulted in total output of 2.5 billion equivalent 2-L bottles. This reflects an operating rate of 75-80%.

One of the major drawbacks for PET bottles, says Stupay, is that material costs rely on the price of crude oil. He estimated that for every increase or decrease in the crude oil price of $1 per barrel, the resin price would rise or fall between 1.2 and 1.5 cents per pound.

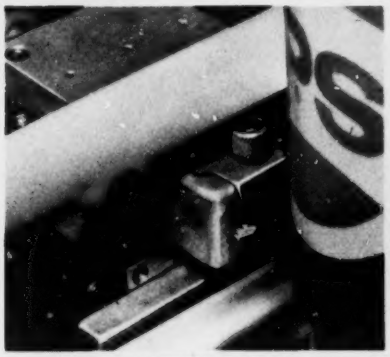
With the Bureau of Alcohol, Tobacco and Firearms' approval of PET bottles for liquor last year, Stupay predicted Brown-Forman, Seagrams and several other companies will begin using 1.75-L bottles for gin and vodka.

That potential market, said Stupay, is 240 million units, not enough to affect glass shipments significantly. Only 11% of all liquor bottles shipped were over 1-L, representing less than 0.5% of total glass volume. If PET gained half of that market, plastic sales would rise $50 million, and glass would lose an insignificant market share. □

NOW

Code-A-Can permanently marks

PLASTI-SHIELD® BOTTLES

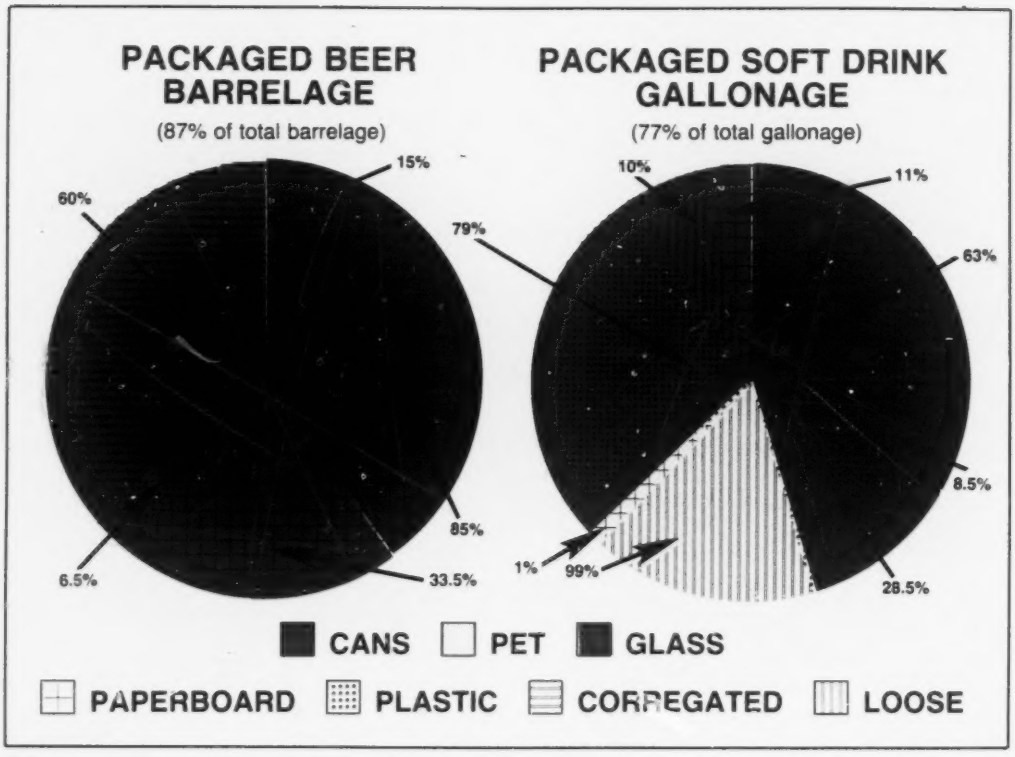


Automatically, Code-a-Can impresses a permanent mark in Plasti-Shield and other plastic coatings for beverage bottles. Bulletin 704-D. **M.E. CUNNINGHAM COMPANY, Box 307, Ingomar, Pa. 15127.**

®PLASTI-SHIELD containers are a registered trade-mark of Owens-Illinois, Inc.

Circle No. 121 on Reader Service Card

Multipack options pose marketing risks



Multipacks, once a term essentially relegated to six packs of bottles and cans, now conjures up a myriad of packages and combinations enclosed in paperboard, plastic, corrugated or film. From the consumer's standpoint, it's merely a choice of packages, but from the bottler's or brewer's perspective, it's a shrewd marketing ploy to get more product into the home.

Yet, choosing which package to put into multipacks, how many units those multipacks should hold and in what medium, is a risky, expensive marketing decision.

Twelve-pack cans of beer are booming. While last year, overall beer sales were up only .4%, Anheuser-Busch increased its capacity from 54.5 million barrels in '81 to 59 million barrels in '82. Industry sources attribute this increase directly to A-B's heavy push behind 12-pack can sales.

Secondary packaging sources report that as many as 35-40% of all cans on the market are packaged in 12s. Despite its success, though, would it work for soft drinks?

Four-packs of 16-oz. Plasti-Shield are relatively new to the market. But is this package a trade up or a trade down in gallonage? Is the consumer buying it in place of a 6-pack or in place of two or three single servings?

Two liter two packs are also relatively new, and the key here is to sell them for the price of two single units. But can it be done?

Obviously, secondary packaging suppliers are bullish on multipacks. Regardless of the package, there is a rationalization to use it—be it the graphics, low cost, ease of application, ease of carrying or convenience to the consumer. Some companies are even willing to put their money where their mouth is. A program begun in Summer 1982, and jointly developed by several can manufacturers, parent companies and secondary packaging suppliers, provides for promotional allowances to bottlers and brewers who install 12-pack can lines. Many of those companies, including Mead Packaging, have continued their participation into 1983 and are reporting that the program has had a broad-based success in the industry.

According to one supplier, the success of beer in 12-packs is a result of aggressive marketing on the part of the beer industry "as far as package design and innovation." The billboard effect achieved on a paperboard 12-pack translates the product image at the point of purchase."

Tertiary packaging ... in the wings

- California packaging and machinery manufacturer has developed paperboard shipper for 2-L PET. Package reportedly has cut-outs on sides that result in substantial material savings. Major East Coast cola bottler now testing.
- Reusable plastic trays for filled cans reduce scuffing and damage during rail shipment. First user is major U.S. brewer who reportedly will order 1 million trays.

Research conducted by his company indicates that as many as 40% of paperboard multipacks picked up and bought by the consumer because of the package's appearance. And that appearance affects specific groups of people: young adults in the 18-39 age bracket strongly feel appearance is important. Older adults, 55 and over, are more likely to buy what they've bought for years. "They tend to be less educated and have lower incomes and are conditioned to buying one brand or one package" he observed.

The problem with the soft drink industry, as this supplier sees it, is that the parent companies spend "an awful lot of money on their advertising yet they are unwilling to convey what they're trying to say in their ads to the point of purchase [in packaging]. Maybe they feel they don't have to. Personally, I'm not sure if advertising alone can carry an entire merchandising program."

parent support lacking

Regardless of the specific reason, all suppliers contacted agree on one thing: parent companies are not giving their bottlers the support needed to make 12-packs a success, or even giving them a viable packaging option.

Why? Some suppliers think soft drink 12-packs may never work as anything but a promotional package. It has also been suggested that, unlike beer, soft drinks are just not something one sits down and drinks a lot of.

Les Behrend, president of the consulting firm Profit Management Development, agrees with that, but also sees a way around it: "A cola would go in 12-packs; that's the largest selling flavor on the market. But other flavors alone wouldn't. Maybe if the flavors in a 12-pack were mixed and matched —half diet and half regular, for example—then it would work."

Others cited bottler reluctance as a main obstacle to 12-pack success. "Bottlers fight for a limited amount of shelf space and this package would be a gamble," said Bill Wright, general manager-Beverage Division of Zumbiel. "There's also the cost involved; at this point, bottlers are not willing to make the capital investment." Another important point Wright noted is the price of package: "It would be okay if you could keep it under $5. But once it goes over that I can't see the consumer spending more than $5 for pop."

12-pack glass

Twelve-pack bottles are beginning to make healthy inroads in the beer industry. Anheuser-Busch has begun packaging Bud and Michelob in glass 12-packs; Miller and Heileman are getting involved in a much smaller way. Sources agree this package is still in its infancy in the beer market and near nonexistent in soft drinks.

The intrinsic problem with the package, its weight, is more likely to be overcome in the beer market where consumers are already buying 12-pack cans and commonly buy cases. With the soft drink market, it's another matter.

Owens-Illinois has introduced the Easy Dozen Contour Pak carrier for 10-oz. PlastiShield bottles that it claims outsold 12-pack cans two-to-one in a recently conducted promotion. The weight of twelve 10-oz. bottles is still within acceptable limits to the consumer, according to the company, the primary benefit of the package being product freshness.

To the bottler, one advantage of this 12-pack is the cost of the carrier and applicating equipment, which O-I says, is the cheapest on the market.

O-I sees the lack of graphics on the carrier as an advantage. "Bottlers must maintain an inventory of different paper wraps for each brand," said a spokesperson for the company. "They don't have to do that with the Contour Pak. The label on the bottle is self-identifiable. We could make the carriers different colors, but we think this would be self-defeating."

promotions possible

If a bottler wants to run some promotion or include a coupon, Owens-Illinois explains that a promo placer, a printer neck hanger, can be placed on one or more bottles before the Contour Pak is applied.

While the reported success of the Easy Dozen shows that a market exists, most suppliers feel it will be at least a year or two before 12-pack glass catches on, and cans, it is also projected, will have to succeed first.

Four-packs for 16-oz. glass are another relatively new entrant to the market, and according to suppliers, parent companies are not happy about them. They are a trade down in gallonage from six-packs and hold slightly less than a 2-L. They are priced competitively with the 2-L, but said one source, the advantage is the freshness of the product.

Success for this package, say some suppliers, will come from a number of markets—sales to single people, or in vacation areas, through mom and pop stores, or in economically depressed areas where consumers can't afford a whole six-pack. There is consensus, though, that any real activity won't begin for a year. □

Ready-to-serve packages boost citrus juice sales

Most citrus products distributed in ready-to-serve cartons, bottles and plastic were up in market share percentage points in 1982, while the brunt of the losses were taken by frozen concentrated citrus juices and synthetics, says *Citrus Digest* which is published monthly by the Florida Department of Citrus, Market Research Department.

Last year, frozen concentrated orange juice (FCOJ) was down 3%, canned orange juice down 17% and ready-to-serve, somewhat of a bright spot, was up 2%, according to George DeJager, market research director with the Florida agency. DeJager noted, however, that year-end Nielsen figures show no change in orange juice trends from year to year.

According to Nielsen, DeJager reported, FCOJ was down 2%, canned was down 8% and ready-to-serve was up 2%. The total orange juice market was down by 2% in total market share.

DeJager said 1982 was the third consecutive year that over 800 million gallons of citrus juice were sold at the retail level, and that accounted for the $2.5 billion in sales.

DeJager projects a resurgence in the orange juice market this year, especially in the ready-to-serve category.

"Orange juice is starting to take off again," he states. "The ready-to-serve has a lot to do with that.

"Unfortunately, grapefruit juice has not done very well in recent years," he added.

The total grapefruit juice market was down 1%, according to DeJager and *Citrus Digest* research. The total number of gallons sold at the retail level was down by 3% from year to year, with ready-to-serve down 7% and canned, a bright spot, up 4%.

Other 100% fruit juices were up in total gallons by 3% last year, while total juice drinks were down 4%, DeJager reports. The biggest losers, he says, were frozen concentrated synthetics and powdered breakfast drinks. □

Consumer purchases of fruit juices and fruit drinks

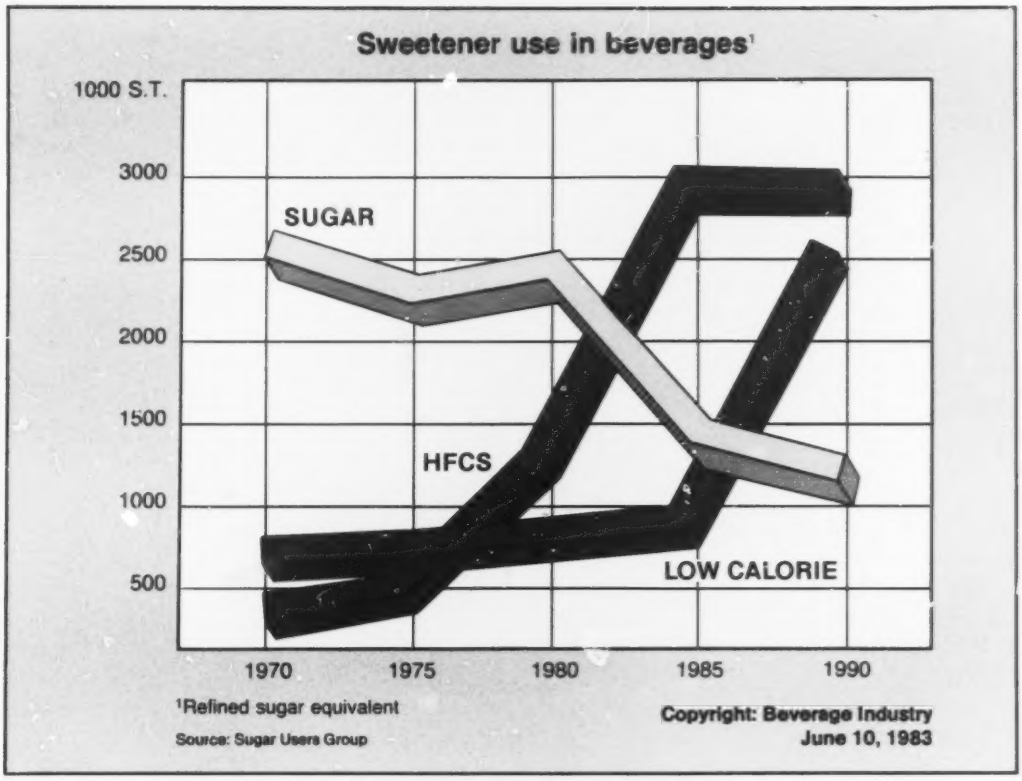
(Based on December to November season)

	Millions of Single Strength Gallons Purchases Year-To-Year			Monthly Share of Fruit Beverage Market		
	1982	1981	% Change	1982	1981	Point Change
Total Fruit Beverages	1496.74	1509.91	−1%	100.0%	100.0%	0.0 pts.
Total Fruit Juice	1122.44	1119.56	NC	77.6	75.0	+2.6
Total Orange Juice	683.71	698.73	−2	46.7	44.7	+2.0
Frozen Concentrated Orange Juice	500.23	517.54	−3	33.6	32.3	+1.3
Ready-To-Serve In Bottles, Cartons, Plastic	159.33	156.36	+2	11.5	10.8	+.7
Ready-To-Serve In Cans	14.64	17.59	−17	1.0	.9	+.1
Total Grapefruit Juice	66.45	60.40	+10	4.1	4.1	0.0
Frozen Concentrated Grapefruit Juice	14.50	12.93	+12	.9	.8	+.1
Ready-To-Serve In Bottles, Cartons, Plastic	13.27	14.44	−8	.9	.9	0.0
Ready-To-Serve In Cans	38.32	32.86	+17	2.3	2.4	−.1
Total Other Fruit Juices	372.27	360.42	+3	26.8	26.2	+.6
Frozen Concentrated Juices—Other Flavors	121.42	101.15	+20	8.5	7.4	+1.1
Ready-To-Serve In Bottles, Cartons, Plastic	158.59	177.14	−10	11.9	12.3	−.4
Ready-To-Serve In Cans	87.96	91.79	−4	6.0	6.2	−.2
Total Fruit Drinks	374.32	390.35	−4	22.4	25.0	−2.6
Total Orange Flavored Drinks	126.81	140.11	−9	8.1	9.3	−1.2
Frozen Concentrated Regular and Synthetics	15.57	24.09	−35	.9	1.2	−.3
Ready-To-Serve In Bottles, Cartons, Plastic	20.41	20.51	NC	1.0	1.3	−.3
Ready-To-Serve In Cans	9.95	10.08	−1	.4	.8	−.4
Powdered Instant Breakfast Drinks-Orange	80.88	85.41	−5	5.7	6.1	−.4
Total Other Flavored Drinks	247.50	250.22	−1	14.3	15.7	−1.4
Frozen Concentrated Drinks-Other Flavors	81.83	94.36	−13	3.4	4.0	−.6
Ready-To-Serve In Bottles, Cartons, Plastic	81.43	78.06	+4	5.9	5.8	+.1
Ready-To-Serve In Cans	77.96	77.81	NC	4.6	5.9	−1.3

Source: Florida Dept. of Citrus

Copyright: Beverage Industry, July 8, 1983

Sweeteners spark further segmentation



In the past, the soft drink industry's segmentation has been along the lines of flavors. Today, the segmentation is taking place on the ingredient level.

Instead of a new flavor, we have a caffeine-free version of an existing flavor. Tomorrow: a new sweetener for that product.

Hopes are high that this further segmentation can create added growth in the industry.

Roberto C. Goizueta, chairman of the board and CEO of The Coca-Cola Co., told SSDT members last spring, "Soft drinks have grown from a soda fountain confection to this nation's number one commercial beverage.

"And this was done by our never being content merely to satisfy yesterday's markets. Instead, we have gathered every opportunity to create new markets.

"That's what our industry is all about—creating new markets—creating new consumers of our products by carving out new markets," he added.

A big part of this segmentation should take place with sweeteners.

The announcement by Pepsi-Cola that it would authorize 50% utilization of HFCS 55 in its bottled and canned products signaled the last big blast in the marketing and segmentation battles, which many key executives have predicted will take place in the '80s.

If they are right, we have not seen the end of the segmentation by ingredients, a fairly recent phenomenon in the soft drink industry.

On the horizon are a number of noncaloric sweeteners, which should add to this segmentation in the sweetener category.

It's these new noncaloric sweeteners, along with increases in the allowable HFCS levels, that will be responsible for the increased segmentation in the industry. These new trends also seem to paint a bleak outlook for sucrose manufacturers.

In fact many observers feel that HFCS along with non-nutritive sweeteners will eventually replace sucrose in soft drinks entirely.

"Frankly, I don't see what's holding it back," said Wayne Renshaw, marketing communica-

Approved allowable levels for HFCS and sucrose, 1981

Company and brand	Sucrose and 42% HFCS	Sucrose and 55% HFCS
A&W Enterprises	50%/50%	0%/100%
A & W Root Beer	75%/25%	25%/75%
Barq's		50%/50%
Barq's Root Beer	50%/50%	0%/100%
Flavors	50%/50%	0%/100%
Coca-Cola Co.		
Coca-Cola	NA	50%/50%*
Sprite	75%/25%	0%/100%
Mr. Pibb	50%/50%	0%/100%
Mello Yello	75%/25%	0%/100%
Hi-C	75%/25%	0%/100%
Santiba	75%/25%	0%/100%
Fanta	**	**
Procter & Gamble		
Crush flavors	NA	0%/100%
Hires	NA	0%/100%
Sun Drop	NA	0%/100%
Dad's Root Beer Co.		
Dad's Root Beer	0%/100%	0%/100%
Bubble Up	0%/100%	0%/100%
Delaware Punch		
Delaware Punch flavors	0%/100%	0%/100%
Dr Pepper Co.		
Dr Pepper	50%/50%	25%/75%
Barrel Head Root Beer	0%/100%	0%/100%
Orange Spot	50%/50%	50%/50%
Sun Ripe Orange	50%/50%	50%/50%
Wink	50%/50%	50%/50%
Hi-Spot	50%/50%	50%/50%
Canada Dry Tonic	75%/25%	50%/50%
Canada Dry flavors	0%/100%	0%/100%
Welch Sparkling Flavors	0%/100%	0%/100%
General Foods		
Country Time	75%/25%	25%/75%
Lipton		
Iced Tea	25%/75%	0%/100%
Lemon Tree	25%/75%	0%/100%
Monarch		
Nesbit	50%/50%	0%/100%
Sun Crest	50%/50%	0%/100%
Nugrape	50%/50%	0%/100%
Kick-a-poo	50%/50%	0%/100%
Mason's Root Beer	0%/100%	0%/100%
Flavette	50%/50%	0%/100%
Mr. Flavor	50%/50%	0%/100%
Dr. Wells	50%/50%	0%/100%
Moxie	50%/50%	0%/100%
Frostie Root Beer	0%/100%	0%/100%
Nestle		
Nestea	0%/100%	0%/100%
Pepsi Cola Co.		
Pepsi-Cola	NA	50%/50%
Mountain Dew	NA	0%/100%
Patio	0%/100%	0%/100%
Teem	50%/50%	0%/50%
R. J. Reynolds		
Hawaiian Punch*	65%/35%	65%/35%
Royal Crown Cola Co.		
RC	75%/25%	75%/25%
Nehi	0%/100%	0%/100%
Upper Ten	0%/100%	0%/100%
Schweppes		
Flavors	0%/100%	0%/100%
Tonic	76%/24%	0%/100%
Ginger Ale	76%/24%	0%/100%
Collins	76%/24%	0%/100%
Ginger Beer	76%/24%	0%/100%
Rondo	76%/24%	0%/100%
Bitter Lemon	76%/24%	0%/100%
Seven Up Co.		
Seven-Up	75%/25%	0%/100%
Like	—	—
Howdy	75%/25%	0%/100%
Shasta		
All products	50%/50%	0%/100%
Squirt Inc.		
Squirt	0%/100%	0%/100%
Sunkist		
Orange	75%/25%	0%/100%
Sun-Rise		
Flavors	0%/100%	0%/100%
White Lightnin'	50%/50%	0%/100%
Triple XXX		
Root Beer	0%/100%	0%/100%
Tru Ade		
Flavors	0%/100%	0%/100%
Vernor's Inc.		
Ginger Ale	0%/100%	0%/100%
Yoo-Hoo		
Chocolate, flavors	10%/90%	—

*50% replacement of HFCS 55 is authorized in packaged product; 75% replacement in fountain products.

**50% replacement of HFCS 42 and 55 in strawberry, grape, root beer, red cherry, black cherry, red cream and birch beer. 25% replacement in Collins, ginger ale, grapefruit, lemon-lime, orange, o-water, iced tea.

*Company is testing at higher levels of HFCS 55

NA = Not approved at presstime

Source: Franchise Co. officials, A. E. Staley

Copyright: Beverage Industry June 10, 1983

Low calorie sweeteners in the 1980's:

Economic data for 1982

Sweetener	Sweetness relative to sugar (sugar = 1)	Annual world production s.t.	Wholesale price $/lb.	Refined sugar food use 1,000 s.t.	Equivalent price $/lb.
Saccharin	300	6,500	4.00	1,500	.013
Cyclamate	30	3,150	1.90	105	.063
Aspartame	200	250	85.00	50	.425
Acesulfame K	150	1	11.00	0	.073
Stevioside	150	165	17.50	22	.118

Source: Schnittker Associates

Copyright: Beverage Industry, June 10, 1983

Domestic sugar and HFCS consumption

	1970	1975	1980	1981	1982	1983
Sugar (000 short tons raw)	11,163	10,302	10,189	9,770	9,150	8,900
HFCS (000 tons, dry)	75.0	530.5	2,174.0	2,700	3,150.0	3,205.0

Source: Lehman Brothers Kuhn Loeb Research

Copyright: John C. Maxwell and Beverage Industry, June 10, 1983

tions manager for A.E. Staley, a major manufacturer of HFCS.

What's been holding back its complete acceptance is questions about its taste because while Pepsi finally approved its use in brand Pepsi, it had been experimenting with lower usage rates in its Mountain Dew for some time.

Improvements apparently have been made in the quality of HFCS, though. "We work continually to improve in terms of quality and there have been some improvements," said Renshaw. "We've further reduced the trace level elements, which were at a very low level to begin with."

All of this has not been a pleasant pill to swallow for the sugar industry. Overall, total domestic consumption of HFCS on a per capita basis has been plummeting over the last two years after a period of stagnation. But it's sugar that's been the big loser, according to **Beverage Industry** director of research/statistics John C. Maxwell, Jr.

In a recent report, Maxwell noted U.S. per capita sugar consumption fell again in 1982 to 73.7 lbs. compared to 79.5 lbs. in 1981. HFCS picked up 3.7 lbs. per person to reach 27.2, while total sugar and HFCS consumption was off 2%."

Maxwell said the decline can be attributed to the economy as well as the health and diet-consciousness of consumers.

Sugar association officials see little hope for turning the situation around. Said one official from the U.S. Cane Sugar Association, "There's not much we can do. People are going to go to something economically feasible."

A spokesman for the U.S. Beet Sugar Association conceded that while HFCS may continue to be the dominant sweetener for soft drinks, it's overall popularity will level off.

"Certainly, it's going to level off. We don't see this (the shift from sugar to HFCS) continuing at its present rate.

"One of the constraints will be capacity of the corn industry," the source said. "There's a question, too, on how much more of an investment the corn industry is willing to make to build even more sweetener plants."

Maxwell predicted that sugar consumption would decline again in 1983 to about 71 lbs. per person. He projected, just like in 1982, HFCS consumption would not absorb all of the decline and total caloric sweetener consumption would fall about 2.4%.

The search also continues for the perfect artificial sweetener. And there are many being now studied by the FDA.

Here's a rundown based on information from the Calorie Control Council:

- Saccharin, which is 300 times sweeter than sucrose, has been used since around the turn of the century. It has a slight aftertaste, but it has a history of safe human usage. The body does not metabolize saccharin and it is excreted by the kidneys unchanged. In 1977, the Food and Drug Administration (FDA) proposed a ban on saccharin because it caused bladder tumors in rats, but a Congressional moratorium was placed on the ban to allow for further research. This moratorium was just extended for another two years.
- Aspartame, which is 200 times sweeter than sucrose, has a sugar-like taste, but is not stable at prolonged high heat and not suitable for baking, cooking or products that have to be heat-sterilized. As for beverages, its stability may pose problems for some applications, geographical areas and other market conditions, and it's expen-

sive. It is digested as a protein and indications are it is no more dangerous than consuming protein.

The FDA approved aspartame for use as a tabletop sweetener and in various foods and dry beverage mixes in 1981 and approval is expected soon for use in carbonated and refrigerated/frozen beverages. It is in use in at least 10 countries.

• Cyclamate, which was banned in the U.S. in 1970 because it was thought to be a carcinogen, is backed by 75 new studies on a petition to reapprove it. It is 30 times sweeter than sucrose and has the least sweetening power of the non-caloric sweeteners under consideration. The petition for reapproval is pending; it's approved for use in 40 countries now.

• Acesulfame K, which is 200 times sweeter than sucrose, has the potential to be used in all areas where sweeteners are presently used. Many studies have been conducted and no ill effects have been reported. It has a long shelf life and is relatively stable, but has a slight aftertaste.

And there are others, too, but approval for most of them is farther off because, in most cases, testing has been limited. According to the Calorie Control Council, these include:

• Thaumatin, a mixture of sweet-tasting proteins from a West African fruit that's 2,000 to 3,000 times sweeter than sucrose.

• Glycerrhizin, a non-caloric extract of the licorice root, which is 100 times sweeter than sucrose and has already been approved here. Its licorice flavor has limited its use to date.

• Stevioside has been approved for use in Japan. It's an extract from the leaves of a South American plant and 300 times sweeter than sucrose. Prospects look good because it is long-lasting, soluble and stable, and has already been used in soft drinks.

• Chloroderivatives of sucrose are produced by altering the su-

HFCS capacity of U.S. producers

(Mil. lbs. dry and liquid basis)

	1980		1981		1982		1983		1984	
	Dry	Liquid	Dry	Liquid	Dry	Liquid	Dry	Liquid	Dry	Liquid
42% HFCS										
ADM	1,300	1,831	1,300	1,831	1,260	1,775	1,420	2,000	1,420	2,000
CPC (a)	355	500	535	750	710	1,000	710	1,000	710	1,000
Nabisco Brands (b)	670	817	495	697	160	225	—	—	—	—
Staley	850	1,200	426	600	426	600	426	600	426	600
Amstar (c)	300	420	300	420	300	420	300	420	300	420
Heinz (Hubinger)	250	350	250	350	250	350	250	350	250	350
Cargill, Inc.	264	371	213	300	405	571	405	571	405	571
Amalgamated Sugar-American Maize	135	190	135	190	125	175	125	175	125	175
Holly Sugar (d)	100	141	100	141	100	141	100	141	100	141
Total	4,224	5,820	3,754	5,279	3,736	5,257	3,736	5,257	3,736	5,257
55% HFCS										
Staley	616	800	1,617	2,100	1,617	2,100	2,100	2,700	2,100	2,700
ADM	550	714	1,250	1,623	1,360	1,768	1,720	2,233	1,720	2,233
Nabisco Brands (b)	300	366	460	597	260	337	—	—	—	—
American Maize	—	—	250	325	250	325	250	325	250	325
Cargill, Inc.	—	—	268	348	536	696	536	696	536	696
Heinz (Hubinger)	150	195	150	195	150	195	150	195	150	195
CPC (a)	—	—	—	—	100	130	100	130	100	130
Total	1,616	2,075	3,995	5,188	4,273	5,551	4,856	6,279	4,856	6,279
GRAND TOTAL	**5,840**	**7,895**	**7,749**	**10,467**	**8,009**	**10,808**	**8,592**	**11,536**	**8,592**	**11,536**

(a) Does not include Canadian plant potential of 300 million pounds, dry basis.
(b) As of June 14, 1982, Nabisco Brands capacity was leased to ADM.
(c) We understand Amstar is adding 200 million pounds of 55% HFCS capacity in 1983; this is not included in the table.
(d) Holly Sugar recently closed its facilities.
Lehman Brothers Kuhn Loeb estimates.
Source: Lehman Brothers
Kuhn Loeb Research

Copyright: John C. Maxwell and Beverage Industry, June 10, 1983

crose molecule. They range from 5 to 2,000 times the sweetness of sucrose, but have not yet been approved for use anywhere.

• Dihydrochalones are noncaloric sweeteners derived from the bioflavonoids of citrus fruits. They're 300 to 2,000 times sweeter than sucrose, but have not been approved for use anywhere yet.

No doubt with so many alternatives the future prospects for sucrose in the soft drink industry is bleak. Whether caloric or noncaloric, there are many cost-effective alternatives that appear to be ready to take its place.

With regard to flavors, it doesn't appear that there's anything new breaking into the picture.

There may be, however, a move by the industry to expand to greater bottling of juice drinks. Top-level industry sources are continuing to grapple with new ways to increase sales volume and this may be one of them.

Harold Bateman, president of Hurty Peck and vp and manager of the beverage industry for Universal Flavors, is one executive that sees this as a trend.

"People want high-juice drinks naturally flavored with no artificial coloring or additives. That seems to be the profile of the juice drink of the future," remarked Bateman.

As an example, he pointed to Shasta's success with CapriSun. Bateman said that while in the past non-carbonated juice drinks have been considered "belly wash" by those in the industry, this new emphasis on "quality and natural ingredients" will give them a new credibility.

Lee Kohnstamm, vp-V and E Kohnstamm, agreed there is great potential for this trend. "Aseptic packaging will be the market for juice drinks," he said, but added that costliness of the machinery and marketing problems may pose roadblocks.

In addition, Kohnstamm noted an increase in the popularity of whipped drinks, particularly pina colada flavoring. □

Get the best insurance possible at the lowest possible cost.

Put James' bottling specialists to work for you.

Your local James Account Executive is your source for James' "Service-in-Depth" —a national team of top-flight specialists available to meet bottling insurance needs —*whatever* they are, *wherever* they are.

Heading the James national team is Fred Ricker, who has been serving the industry and solving the insurance needs of bottlers for over 27 years. Fred and his team of experts will work directly with you and your James Account Executive to develop an insurance package precisely tailored to *your* company, *your* operations, *your* unique property, liability, and employee benefit needs.

Fred Ricker, head of James' national team of bottling specialists

Get the best, most cost-effective insurance coverage possible. Call in your nearest James Account Executive... or write to Fred Ricker directly at Fred. S. James & Co., Inc., P.O. Box 7601, San Francisco, CA 94120.

James

FRED. S. JAMES & CO., INC.
Insurance Brokers Since 1858
Insurance and Risk Management Services
Through More Than 100 Offices
Around The World

Circle No. 172 on Reader Service Card

Bottled water popularity should double by 1990

For the rest of the '80s, the domestic bottled water market should grow by leaps and bounds, much as it has for the past six years. Total U.S. bottled water consumption is expected to hit 1.8 billion gallons in 1990, more than double current use, according to figures from Beverage Marketing Corp. (BMC), New York City.

Domestic producers should account for almost all of that gallonage, says BMC. Perrier, which owns Poland Spring (ME), Oasis (TX) and Calistoga (CA) bottled water companies, generally agrees with BMC's 1990 projections, but believes imports could account for more than BMC's estimate (35 million gallons).

Kim Jeffery, sales vice president at Perrier, says his company expects a 50% rise in total U.S. bottled water sales by 1985. Assuming BMC's figures, 1982 sales of 834.2 million gallons should mean the bottled water market will top the billion-gallon level in three years.

The upward trend is especially strong for still water (noncarbonated), continues Jeffery. Still water is sold mainly in one-half and one-gallon plastic containers in most of the country. In California, however, the bulk of still water sales is home delivery of 5-gallon containers.

Perrier says that in the six major markets for still water (New York, Miami, San Francisco, Los Angeles, Houston and Boston), sales grew an average 46% in 1982, compared to 1981. Jeffery calls that growth "phenomenal."

He and other sources attribute these strong sales of still water to consumer dissatisfaction with local municipal water quality and a subsequent desire for "natural," "healthful" drinking water.

Even though sparkling waters are selling well and, according to BMC numbers, should continue to grow, Jeffery says, "our strongest growth is in the one-gallon container still water business."

BMC lumps bulk (still) and sparkling waters together in its bottled water sales figures for 1976 through 1982. Likewise, club soda and seltzer water are grouped together.

Between '76 and '82, total bottled water sales in the U.S. have risen two-and-a-half times to 834.2 million gallons. Domestic companies' bulk/sparkling waters have gone from 254.2 million gallons in '76 to 723.1 million this year, and club/seltzer water sales have doubled to 99.0 million gallons.

Domestically-produced waters have risen steadily, but the imports' sales have been in a boom and bust cycle. Between '76 and '79, sales of imported bottled waters (mostly sparkling) ballooned from 1.2 million gallons to 28.1 million. In 1980, sales dropped substantially, to 11.4 million gallons.

Since then, imports have inched up to 12.1 million gallons sold in 1982, according to BMC. A few sources at imported bottled water companies dispute BMC's numbers on sales since 1980. They say the numbers don't accurately represent inventory depletions. Inventories were built up enormously during the boom period of '76 to '79.

Also, in that period, bottled water companies' advertising expenses zoomed to $10.7 million. Since 1979, however, advertising expenditures have dropped off considerably. The reason for this, according to sources, is industry consolidation. A prime example is Perrier's three acquisitions over the past two years.

Estimated 1981 domestic water sales by company

Company	Sales (millions $)	Share
Foremost/McKesson	94.5	15.2%
Beatrice Foods Co.	92.0	14.8
Hinckley Schmitt	21.0	3.4
Nestle Enterprises	19.0	3.1
Beverage Management Inc.	17.6	2.8
Sierra	12.0	1.9
Mountain Valley Water Co.	10.0	1.6
Glenwood/Inglewood	10.0	1.6
Poland Spring Co.	10.0	1.6
Oasis Water Co.	5.0	0.8
Belmont	4.5	0.7
Calistoga	4.0	0.6
Artesea Waters Inc.	3.5	0.6
Kentwood	3.1	0.5
Syfo Water Co.	3.0	0.5
Saratoga Springs	3.0	0.5
Wometco Enterprises	3.0	0.5
Sub-total	315.2	50.7
All others	306.1	49.3
Grand Total	621.3	100%

Source: Beverage Marketing Corporation; Beverage Data Bank.

Copyright: Beverage Industry, December 3, 1982

1981 U.S. bottled water market share by region

	Domestics Bulk/ Sparkling	Imports Mineral		Domestics Bulk/ Sparkling	Imports Mineral
New England	2.1%	10.4%	Southeast	16.5	16.0
Mid Atlantic	12.7	31.9	Southwest	9.1	5.1
Great Lakes	9.3	12.3	Rocky Mountain	1.1	1.0
Plains	1.8	1.8	Far West	47.4	21.5
			Total	100.0%	100.0%

Source: Beverage Marketing Corporation, Beverage Data Bank.

Copyright: Beverage Industry, December 3, 1982

U.S. bottled water market gallonage* by type 1976-1982

	Domestic water			Total imports	Total bottled water
	Bulk/sparkling	Club/seltzer	Total		
1976	154.2	51.6	305.8	1.2	307.0
1977	278.7	53.1	331.8	3.3	335.1
1978	413.4	53.4	466.8	13.4	480.2
1979	476.8	59.6	536.4	28.1	564.5
1980	537.3	79.5	616.8	11.4	628.2
1981	621.3	87.4	708.7	11.6	720.3
1982(E)	723.1	99.0	822.1	12.1	834.2

*Millions of gallons.

Source: Beverage Marketing Corporation; Beverage Data Bank; Bureau of the Census; John Maxwell, Lehman Bros.; Kuhn Loeb Research.

Copyright: Beverage Industry, December 3, 1982

Estimated domestic bottled water sales by brand 1981

Company	Brand	Brand sales (millions $)
Foremost/McKesson	Sparkletts	65.0
	Alhambra	17.0
	Crystal Btl.	10.0
	Hygeia	2.5
Beatrice Foods Co.	Arrowhead	60.0
	Great Bear	20.0
	Ozarka	12.0
Hinckley Schmitt	Hinckley Schmitt	21.0
Nestle Enterprises	Deer Park	19.0
Beverage Management Inc.	Crystal Water	8.7
	Polar Water	6.1
	Perfection	2.8
Sierra	Sierra Spring	12.0
Mountain Valley Water Co.	Mountain Valley	10.0
Glenwood/Inglewood	Glenwood/Inglewood	10.0
Poland Spring Co.	Poland Mineral	10.0
Oasis Water Co.	Oasis Drinking Water	5.0
Belmont	Belmont	4.5
Calistoga	Calistoga	4.0
Artesia Waters Inc.	Artesia Mineral Water	3.5
Kentwood	Kentwood	3.1
Syfo	Syfo Bottled Water	3.0
Wometco Enterprises	Deep Rock	3.0
Saratoga Springs	Saratoga Vichy	3.0

Source: Beverage Marketing Corporation; Beverage Data Bank

Copyright: Beverage Industry, December 3, 1982

In any case, Foremost/McKesson, with its four brands, was the no. 1 bottled water company in 1981 with $94.5 million in sales and a 15.2% market share. Beatrice Foods Co. was no. 2 with $92 million in sales and a 14.8% share of the U.S. market. Far behind the two leaders are Hinckley Schmitt ($21 million), Nestle Enterprises ($19 million) and Beverage Management Inc. ($17.6 million).

The remaining companies listed by BMC held less than 2% of the market in 1981.

Individual brand leaders in 1981, according to BMC, were Sparkletts (Foremost/McKesson) and Arrowhead (Beatrice), which sold $65 million and $60 million, respectively. Hinckley Schmitt brand was no. 3 with $21 million and Beatrice's Great Bear was no. 4 with $20 million.

According to BMC, people in the Far West drink significantly more bottled water than those in any other regions of the U.S. Far Westerners, mostly in Los Angeles and San Francisco, account for 47.4% of domestically produced bulk and sparkling waters; they also account for 21.5% of imported mineral water consumption.

Mineral water imports have a larger following in the Mid-Atlantic region, mainly New York City. The 16% shares in the Southeast are almost entirely accounted for by Miami, FL. In the New England region, Boston accounts for almost all of the imported mineral water share. Areas with the least bottled water consumption are the Rocky Mountain states and the Plains states.

Total U.S. bottled water consumption, while growing rapidly, nonetheless has a long way to go to challenge per capita consumption of soft drinks, coffee, beer, milk or even juices. Per capita consumption of bottled waters in 1981 was less than two gallons, lowest of any commercial beverage.

It is generally agreed, however, that Americans are switching their preference from commercial beverages that are cold, carbonated, and high-calorie to drinks that are cold, not necessarily carbonated and definitely low-calorie. □

Excise tax changes to have major impact on beverage industry distribution costs

President Reagan signed the Surface Transportation Assistance Act of 1982, Public Law 97-424 on Jan. 6, 1983. This act, consisting of 109 pages in the Conference Report, makes some of the most sweeping changes in the Federal Excise Tax since the tax was imposed more than 50 years ago.

The press generally referred to the Act as a "gas tax increase", but it is much more than that.

It changes the manufacturer's excise tax on trucks, truck bodies, and trailers, and it also affects the annual Federal Highway Use Tax payable on highway units whose weight exceeds a specified threshold.

As with any new law, there are a few ambiguously worded provisions subject to some latitude in interpretation. Extensive conferences by the author with some of the persons involved in writing the law and with personnel of the Excise Tax Branch of the Internal Revenue Service, which will enforce the law, have helped to clear up many of the issues. The latest and most definitive information possible is presented in this article. However, as with any matter of law, the answers are still unofficial at this point. Special cases may have subtle differences which change the situation. Courts may overrule IRS rulings. Therefore, as with any matter of law and accounting, the reader should look to his own professional advisor for the final word.

The Act makes changes in three major areas of excise tax: it changes the tax on fuels and lubricating oil; it changes the tax on trucks and trailers, and parts and accessories for them (including tires, tubes and tread rubber); and it changes the annual Highway Use Tax on heavy vehicles.

Table 1: Increases in highway use taxes[1]

Fiscal year beginning July 1	Applicable tax rate	Maximum tax
1984	$40.00	$1,600.00
1985	40.00	1,600.00
1986	44.00	1,700.00
1987	48.00	1,800.00
1988 (& thereafter)	52.00	1,900.00

[1]For gross weight exceeding 55,000 lbs.

Source: U.S. House of Representatives (Report 97-987 page 86), Surface Transportation Assistance Act of 1982-Conference Report

Copyright: Beverage Industry April 8, 1983

It is estimated that the additional net revenue to the Treasury will be $1.7 billion in Fiscal 1983; $3.9 billion in Fiscal 1984; and an average of $4.25 billion from Fiscal 1985 through Fiscal 1988, for a total 6-year increase of $22.6 billion after all offsets. Most of this increase will come from the additional tax on fuels.

The act provides that the excise tax terminate on and after Oct. 1, 1988. However, realistically speaking, every previous tax bill since 1954 has provided a termination date for the excise tax, and the termination date has been extended without exception ever since. It is realistic to expect that this date will also be extended, and that the excise tax will not be allowed to expire.

The first category, fuels and lubricating oil, will see a dramatic increase in the level of taxation. Before the April 1 increase, gasoline, diesel fuel and special motor fuels had a federal excise tax of 4 cents per gallon. Gasohol and alcohol fuels had a 4 cents per gallon exemption, rendering them nontaxable. Fuels used for nonhighway business use were taxable at 2 cents per gallon, and fuels used by state and local governments, private buses, not-for-profit educational institutions, farms, and qualified taxi cabs were currently exempt. Lubrication oil was taxed at 6 cents per gallon.

As publicized, the act increased the fuels tax by 5 cents per gallon on April 1, 1983. In other words, gasoline, diesel fuel, and special motor fuels are taxed at 9 cents per gallon. Gasohol retained its 4 cents per gallon exemption, making it taxable at 5 cents per gallon after April 1. Alcohol fuels are totally exempt, as are non-highway qualified business uses, state and local governments, private buses, not-for-profit educational institutions, and farming. Qualified taxi cabs retained their 4-cents exemption, resulting in a 5 cents-per-gallon tax.

The 6-cents-per-gallon tax on lubricating oil was repealed on April 1, 1983.

Since virtually all beverage operations use either gasoline, diesel fuel, special motor fuel (such as LP gas), or gasohol, the net effect of the act was a 5 cents-per-gallon increase in the price paid for fuel. The special-fuels provision is worth

Table 2: Comparison of old and new use tax assessments[1]

Two-axle truck-tractor actual unloaded weight	Assumed total vehicle weight	Annual use tax under old law	Annual use tax 7/1/84–6/30/86
5500 to 7000 lbs.	30,000 lbs.	$ 90	-0-
7000 to 9500 lbs.	40,000 lbs.	120	$225
9500 to 11,000 lbs.	50,000 lbs.	150	475
over 11,000 lbs.	60,000 lbs.	180	800

For two-axle truck-trailers

Source: IRS Form 2290 and J.A. Hackney, III

Copyright: Beverage Industry
April 8, 1983

noting, since it is often overlooked. Non-taxable LP gas (for heating purposes) which is used in a highway vehicle became taxable as a special motor fuel, the same as diesel oil. A fleet operator who purchases these fuels tax-exempt must file a Quarterly Excise Tax Return, IRS Form 720, and pay tax on the exempt fuel used as motor fuel.

manufacturers excise tax

The second category of changes produces the most sweeping remodeling of existing tax law. Effective Jan. 7, 1983, the federal manufacturers excise tax was repealed on truck chassis and truck bodies suitable for use with (and ordinarily used with) a vehicle which has a gross vehicle weight of 33,000 lbs. or less. Also repealed was the tax on truck trailer and semi-trailer chassis, and bodies suitable for use with a trailer or semi-trailer, which have a gross vehicle weight of 26,000 lbs. or less. For purposes of the act, a trailer is considered to be a separate chassis and body.

In recent years, the gross vehicle weight has become synonymous with the Gross Vehicle Weight Rating (GVWR) as defined under regulations prescribed by the National Highway Traffic Safety Administration, U.S. Department of Transportation. The IRS has traditionally followed the same guidelines in determining gross vehicle weights for manufacturers excise tax purposes in recent years. However, it is not required to do so. The act gives the Secretary of the Treasury or his delegate (Commissioner of Internal Revenue) the authority to prescribe regulations to determine the gross vehicle weight.

On April 4, 1983, the IRS issued temporary regulations which provide that "in determining the gross vehicle weight rating of a vehicle, the strength of the chassis frame and the axle capacity and placement must be taken into account. Spring, brake, rim and tire capacities are not determinative of the gross vehicle weight rating because of the flexibility in changing such parts of the vehicle." In other words, the GVWR for excise tax purposes will be different from the GVWR for Safety Standards.

Virtually all truck chassis and truck bodies used in beverage delivery, as distinguished from trucktractors and truck trailers or semitrailers, have GVW ratings below 33,000 lbs. and became tax exempt on Jan. 7, 1983. Most beverage trailers have gross weights well over 26,000 lbs. and continued to be taxable after January 7, 1983.

A major feature of the new act is that the excise tax on trucktractors, that is, trucks equipped with a coupling device such as a fifth wheel chiefly used for use in combination with a trailer or semitrailer, was **not** repealed. Trucktractors are subject to excise tax regardless of their gross vehicle weight rating. The impact of this will be discussed later.

A provision of the act also allows for refunds of excise tax paid on units for which the tax is repealed which were delivered on or after Dec. 3, 1982. Since this was a manufacturer's tax, the manufacturer must apply for the refund or credit. To obtain the refund or credit, the manufacturer must show that the unit was actually sold to the ultimate purchaser on or after Dec. 3, 1982 and that the tax has been refunded to such purchaser. The deadline for applying for refund was July 1, 1983, and the deadline for obtaining it is Oct. 1, 1983.

The tax on all automotive parts and accessories was also repealed, effective Jan. 7, 1983. Unlike trucks, there is no provision for refund for parts sold prior to that date. Notwithstanding the blanket repeal on parts, there is a special provision which will continue to make some parts taxable if installed on a taxable vehicle within 6 months after it is placed in service. This provision will also be discussed later.

The act also made substantial changes in the taxation on tires, effective Jan. 1, 1984. Previously, tires for highway vehicles were taxed at 9.75 cents per pound of rubber weight. Laminated tires were taxed at 1 cent per pound, inner tubes were taxed at 10 cents per pound, and other tires were taxed at 4.875 cents per pound. Tread rubber, such as used in recapping, was taxed at 5 cents per pound.

The act repealed all of the excise taxes on all tires, tubes, and tread rubber, except those of the type used on highway vehicles. For

highway vehicle tires, the first 40 lbs. of tread rubber are now exempt from tax. The next 30 lbs. will be subject to a 15 cents per pound tax. The next 20 lbs. are taxed at 30 cents per pound, and rubber weight over 90 lbs. is taxed at 50 cents per pound. For example, a tire with 100 lbs. of rubber weight would have been taxed at $9.75 under the old law. The new law increases the tax to $15.50.

tax increase and changed to retail level

The excise tax increased from 10% to 12%, effective April 1, 1983, for those items which remain taxable. In addition, the tax was changed from a manufacturer's (wholesale) tax to a retail tax on that date. This change in the level to which the tax applies was probably the most sweeping change in the act.

Heretofore, the 10% excise tax applied to the manufacturer's wholesale price of the taxable item. If the manufacturer sold at retail, the wholesale price was established by Revenue Ruling as 90% of the actual retail price. In other words, the effective tax rate had been 9% on beverage bodies and trailers purchased by the user from the manufacturer. This has been the normal purchasing practice in the beverage industry. If the unit subsequently had additional parts added after purchase, the parts were taxable at a separate rate of 8%, but there was no further tax consequence for the basic unit. The labor for the installation of the parts was excise-tax exempt.

After April 1, 1983 all of this changed. Whereas the old tax rate was effectively 9%, the new tax rate is 12%. Most beverage trailer users experienced a 33% increase in the tax they pay on trailers, since most trailers remain taxable.

Should a taxable unit be bought from other than the manufacturer, such as a distributor or a truck dealer, then the full marked-up price of the unit is now subject to tax at the 12% level. This differs from the old law, wherein the tax was a manufacturer's tax and there was no subsequent tax liability for progressive levels of sales.

It has no doubt occurred to some that a possible way to save tax is to purchase a taxable unit without several of its major detachable parts and then to purchase the parts separately in a tax-free transaction. Evidently the Congress anticipated this, because there is a provision in the act which taxes at 12% any parts installed on a taxable unit within 6 months after the date such unit was first placed in service, just like tax on the unit. This provision became effective April 1, 1983. The tax applies both to the part and the cost of installation, which differs marketedly from the old law; labor of installation was not taxable under the old law. There is an exemption if the parts and labor total no more than $200 or if they are bonafide replacements of parts, originally a part of the vehicle. The owner of the company installing the part or accessory is now secondarily liable for the tax, meaning that in most cases he must collect the 12% himself.

The act provides definitions as to what is meant by the "first retail sale": the first sale other than for resale is the sale to which the tax applies. A manufacturer who might lease a vehicle rather than sell it is considered to be the first retail seller. In such cases, he must collect 12% of each lease payment until the total tax collected equals 12% of the retail price.

A manufacturer who uses an article rather than selling it is liable for the tax in the same manner as if the article were sold at retail by him. This is an often overlooked but important provision which is likely to affect every beverage trailer user at one time or another, as will be explained later.

The retail tax is based on the price of the article which includes any charge incident to placing the article in a condition ready for use. Trade-ins may not reduce the retail price for excise tax purposes. However, the retail price does not include state and local sales and use tax, nor does it include the excise tax.

It was mentioned earlier that a manufacturer who produces and uses a taxable article is liable for the tax in the same manner as if he sold it. This is an especially important provision because of a concept known as "further manufacturing". It is possible to purchase an article that is tax-exempt and then perform some operation on it, or install some part, which converts it into a taxable article. This process is known as "further manufacturing". The owner of the article at the time of conversion is the "statutory manufacturer" and is liable for the tax.

For example, suppose a beverage-trailer user purchased a 30,000-lb. GVWR truck from his local truck dealer. A 30,000-lb. GVWR truck may be used either to carry a route body or it may be used to tow a route trailer. The truck is exempt when used with a route body but taxable when used as a truck-tractor to tow a route trailer. The truck manufacturer and dealer may not know the intended use, and therefore the truck chassis may be sold tax free.

Subsequent to purchase, the beverage-trailer user may contract

The law at a glance

- **Motor fuels:** Substantial increase in taxes paid, perhaps as much as $150 per vehicle annually.
- **Excise tax on new units purchased:** tax savings on route-truck chassis of 33,000 lbs. GVWR or less can exceed $2,000; on route-truck bodies, $1,000. For trailers, the increases can be from $500 to $700 on the truck-tractor and $600 for the trailer.
- **Highway use taxes:** Typical route body exempt, saving $81 per year if empty weight exceeds 13,000 lbs. Taxes on trucks with tractors for route trailers (GCWR 50,000 lbs.) will increase from $150 to $475.

with his trailer supplier to install a fifth wheel on the truck to make it suitable for towing a route trailer. It is usual to perform other work at the same time, such as shortening the chassis frame and installing additional gas tanks, etc. Such action has significant tax consequences.

First, the act of installing the fifth wheel is "further manufacturing," in that it converts a non-taxable vehicle into a taxable vehicle. The owner of the truck chassis at the time of the conversion is the "statutory manufacturer" and is liable for the tax. This is normally the beverage trailer user.

In addition, the installer who converts the unit is jointly responsible for collecting the 12% excise tax on all parts and labor installed on the taxable vehicle within six months after it was first placed in service. Although the exact meaning of this is not certain, it is probable that the IRS will rule that the conversion creates a new vehicle, no matter how old the truck chassis was at the time of conversion. Therefore, any parts installed at, or within six months after, conversion become taxable.

The same situation applies to a tax-exempt trailer that is converted into a taxable trailer. For example, a user might choose to purchase a trailer with a light-duty axle which has a gross vehicle weight rating of 26,000 lbs. or less. Subsequently, he may remove the light duty axle and replace it with one of heavier duty which increases the gross weight rating above 26,000 lbs. This converts the trailer from a non-taxable one into a taxable one and is "further manufacturing." The owner of the trailer at the time of conversion is liable for the tax.

penalties

There may be a tendency to say, "So what," make the conversion, and take one's chances on being caught. Do so at great peril; the potential penalty is quite severe! First, the assumption that the tax will be 12% of the user's total cost of the converted item is currently erroneous. Until it is rescinded, Revenue Ruling 73-560 establishes that the constructive sale price for items which are further-manufactured and then used by the further-manufacturer, will be the user's total cost plus a mark up of 10%.

In other words, the effective tax rate on further-manufactured items is 13.2% of the cost base. It is also normal for the IRS to add substantial penalties and interest which can easily exceed 100% of the original tax liability. Finally, if the IRS believes that there is a premeditated attempt to defraud the Treasury, it may seek a fraud indictment. This is not as farfetched as it seems; the IRS has successfully prosecuted executive officers of at least one major manufacturer of trailers for excise tax fraud.

The mechanics of reporting the tax on further manufacturing involves the filing of a Quarterly Excise Tax Return, IRS Form 720. The tax is computed based on 12% of the constructive sale price; and credit is deducted for any tax already paid, such as the tax on the parts and labor of installation. The difference is remitted to the Treasury.

It should be obvious from the foregoing that it is both simpler and cheaper to purchase the taxable item already manufactured to the user's specifications from someone else. There will be no further tax consequence, and the user will have the peace of mind that goes with compliance. The alternative is to "play games" with the law, and the chances of being caught are quite high. Some manufacturers and users attempted to circumvent the 1971 amendments to the Excise Tax Code, which established a 10,000-lb. GVWR threshold for taxation. The IRS quickly moved in on the subterfuges and eliminated them.

highway use tax

The third category of tax changes involves the annual Federal Highway Use Tax. Prior to the new act, the tax was assessed at $3.00 per 1,000 lbs. of gross vehicle weight if the vehicle weighed more than 26,000 lbs. In other words, if a vehicle weighed 26,000 lbs. or less when loaded, it was exempt. If it weighed 27,000 lbs. loaded, the entire 27,000 lbs. were taxable. The total tax in such a case was $81.00.

The Internal Revenue Service applied the tax based upon the empty weight of the vehicle. Someone in the IRS decided many years ago that a truck was capable of a gross weight equal to twice its empty weight. Therefore, if the empty weight was 13,000 lbs. or less, the unit was exempt. If it was greater than 13,000 lbs., the IRS assessed an annual use tax equal to the lowest taxable category of 27,000 lbs., or $81.00.

The IRS followed a similar line of thinking for combination units (truck-tractor and trailer), except that it was assumed that a two-axle truck-tractor could tow a trailer of four times the tractor's weight. In other words, the total vehicle was assumed to weigh five times as much as the tractor. The tax was then assessed on the truck-tractor only, based on the assumed weight of the combination vehicle.

"Slots" were established for truck-tractors with varying empty weights, and the tax was assessed accordingly. For example, a two-axle truck-tractor with an unloaded weight of 7,000 lbs. to 9,500 lbs. was assumed to weigh an average of 8,000 lbs. Such a tractor was assumed to be capable of pulling a trailer of four times its own weight, or 32,000 lbs., for a Gross Combination Weight Rating of 40,000 lbs. The tax was therefore $120.00.

The new act increases the threshold for taxability for highway use tax from 26,000 lbs. to 33,000 lbs. In addition, a unit which passes the threshold is only taxed on the basis of its gross weight which exceeds 33,000 lbs. Under the old law, a unit which exceeded the threshold paid tax from the first pound.

For vehicles with gross weights

of 35,000 lbs. or more, the act produces an increase in annual tax, and in most cases, the increase will be dramatic. The act provided that units with taxable gross weight of at least 33,000 lbs., but less than 55,000 lbs., will be assessed an annual tax of $50 a year plus $25 for each 1,000 lbs., or fraction thereof, in excess of 33,000 lbs. Units which exceed 55,000 lbs. gross weight, but less than 80,000 lbs., will be assessed a tax of $600 a year plus the "applicable tax rate" for each 1,000 lbs., or fraction thereof, in excess of 55,000 lbs. Units with taxable gross weight of 80,000 lbs. or more are being assessed the maximum tax.

The increase in the Highway Use Tax becomes effective on July 1, 1984. The "applicable tax rate" and the maximum tax for units exceeding 55,000 lbs. gross weight will escalate from 1984 through 1988 based on Table 1.

Both the old law and the new act provide that a truck chassis and body which is equipped with a pintle hook or other towing device is assumed to be intended for use as a combination vehicle, and the use tax is assessed accordingly.

Vehicles used less than 5,000 miles on public highways are exempt from the annual Use Tax. It is not inconceivable that some route trailers in central-city use may fall into this category. In such cases, the IRS will either waive the tax or refund it if it has already been paid, upon certification that the vehicle did not exceed 5,000 miles on the public highways during the taxable period (fiscal year). Should the unit exceed 5,000 miles, the exemption will be lost for that period.

Vehicles placed into service during the taxable period, and which are subject to Highway Use Tax will be liable for a prorata payment of the tax for the portion of the year during which they were in service, based on the months of use.

The Internal Revenue Service anticipates that it will continue to use a slotting system for assessment of the new tax based upon the empty weight of the truck-tractor only, without regard to the weight of the trailer. It is possible that the old formulas might be updated, and the IRS expects to receive some assistance from the Department of Transportation in establishing these guidelines.

Considering the dramatic increase in the annual tax, the IRS will probably establish more weight categories, so that each category will have a smaller tax difference. The IRS has until July 1, 1984 to develop these regulations, so taxpayers will have ample notice.

Since it is not certain how the tax will be assessed under the act, it is impossible to give an exact comparison. However, based upon the old policy, Table 2 gives a comparison of the old tax and the new tax categories of two-axle truck-tractors, which are the type most commonly used for route trailers.

Most beverage fleet operators are already familiar with the annual Highway Use Tax and are paying it. For those who are not, the tax is reported by filing a "Federal Use Tax Return on Highway Motor Vehicles," IRS Form 2290. As with this and all IRS forms, additional information and advice can be obtained from your tax advisor and/or the Internal Revenue Service.

summary

In summary, dramatic changes have been made in the Tax Law. Overall, the beverage industry will probably save money as a result of the changes.

In the case of motor fuels, the effect will be a substantial increase in the annual tax paid, probably on the order of $150 per vehicle.

In the case of the excise tax on new units purchased, some will be considerably cheaper and some will be considerably more expensive. The tax savings on a route truck chassis of 33,000 lbs. GVWR or less can exceed $2,000, and the tax savings on a route-truck body can exceed $1,000. On the other hand, purchasers of route trailers and truck-tractors to tow them will find a tax increase from present levels on the order of $500 to $700 for the truck-tractor and $600 for the trailer.

In the category of annual Highway Use Tax, the typical route body will become exempt, thereby saving $81 per year if it was taxable under the old law (empty weight exceeding 13,000 lbs). However, the typical route trailer with tractor has a gross weight of approximately 50,000 lbs. For that weight, the tax will increase from $150 at present to $475. Since this is an annual tax, it will have the greatest impact of the three.

Overall, the reduction in excise tax on the sale of route trucks and bodies, when amortized over their life, will more than offset the additional tax on fuels. Those route trucks with bodies weighing more than 13,000 lbs. empty will also save $81 per year in Highway Use Tax. Therefore, route trucks and bodies will be cheaper to buy and only slightly more expensive to operate under the new Act.

On the other hand, truck-tractors and trailers will be more expensive in all situations. The excise tax will add approximately $1,200 to the purchase price, and users also will pay about $500 more tax per year than presently. It is evident that the act was designed to assess a larger share of the cost of highway construction and maintenance to trailer operators. Over-the-road, long-distance haulers do not have a choice. Soft drink bottlers and beer distributors do.

In recent years, the trend in the beverage industry has been sharply toward trailers, with the most recent industry statistics showing approximately one-third of total-unit deliveries being trailers. The act may cause a reversal of this trend.

As with all business decisions, the choice of route delivery equipment is a matter of weighing the financial advantages of trailer operation against the additional tax cost under the act. In the months ahead, many beverage fleet operators will be doing just that. □

Written by James A. Hackney III, president and CEO, Hackney Industries, Inc., Washington, NC.

marketing technology at Coca-Cola USA, says the company was trying to come up with ways to utilize the technological boom. In developing the talking vender, they wanted to build it with attributes appealing to consumers, he says.

"It gives personality to an inanimate object," he maintained. "It relates to the consumer personally." He also says it has been very successful with bottlers, and most importantly, Coke has noted sustained increase in sales of over 30%.

Coke's next project is to get its new machines out into the market. These new machines will attempt to capitalize on the enormously successful world of video games. One game will be titled "Catch a Coke": the other, "Spell Coke," says Coke spokesman Rob Martin. Morgan and Martin would not reveal exactly when these machines will be rolled out, except for indicating it will happen "very soon." Coke has also introduced a second generation of talking venders. A total of nine options are available, including a machine that can give discounts on multiple purchases; a machine that dispenses promotional coupons, as well as an attachment that accepts dollar bills.

Jim Douglas of Coin Acceptors, Inc. is thrilled with bottler and parent company interest in new vending technology and concepts.

"There has been more interest in the last year than in previous years.

"New technology can be more friendly, more sophisticated," he says. "There's a renewed interest in vending because the major soft drink companies have been fighting it out for so long on the supermarket shelves and now it's time for a change."

Douglas cites vending as being attractive to the parent companies because consumers are able to "sample" cold products. On the supermarket end, they have to take the product home and wait for it to get cold. He termed vending "paid sampling."

"There is a better awareness of vending opportunities," Douglas says. "The new machines are friendlier to the customer, which is where sales come from."

For instance, he explains, the company is working on the concept of the machine that is able to tell a customer the machine is out of a selection much easier and quicker and with no hassling to get his money back.

"There is a lot of developmental activity going on here and a lot of customer interest," he claims. He sums up best the current vending market in very appropriate terms: "An awful lot of things are brewing. One (development) will probably make front-page news." □

Vending shipments down 3% to $214 million in '82

According to the latest figures from the U.S. Department of Commerce, 1982 manufacturers' shipments of vending machines for beverages totaled $214 million, a decrease of 3% from the 1981 figure of $221 million.

Most industry experts agree that while a decrease in shipments was not exactly what they were hoping for, it was expected. And though the industry is not declining as much as it has in recent years, most feel shipments will remain the same for awhile. One major vending manufacturer even felt total industry shipments would be slightly less this year than they were in 1982.

"At the midpoint of 1983, we've had indications that bottle/can vending shipments will be down slightly from 1982," says the manufacturer official, who asked not to be identified. "At best, the industry will stay the same instead of experiencing any major change... This business is an economic trend follower."

Probably the most optimistic about 1983 and most willing to forget past economic problems are the coin changer manufacturers. "They are able to be more optimistic because not only do they manufacture changers for the new machines, they do work for older machines as well," says one source. "Machine manufacturers tell a different story."

Jim Douglass, vice president of marketing with Coin Acceptors, Inc., is predicting that 1983 will be "a good year, but not a record setter. I've talked with various bottlers and manufacturers, and universally, we feel the entire business is picking up."

According to the Commerce Dept. report released in June, canned beverage (refrigerated) vendors shipped in 1982 totaled 166,912, an approximate 3,550 drop from 1981's shipments of 170,463. The 1982 can vendor total also includes bottle machines as well since the majority of vendors shipped were convertible, says Walter Reed, director of public relations with the National Automat-

ic Merchandising Association (NAMA).

Figures for cup (postmix) machines were not made available in the Commerce report; package milk and juice (indoor) figures were down by 1,879 units in 1982 with a 1,387 total shipment; in the hot beverage segment, freeze-dried or liquid concentrate machines were down approximately 950 units from 1981 while fresh brew, coffee and combinations were down significantly—6,186 units in 1982 compared to 1981's 8,359 total, according to the Commerce Department report.

Coinco's Douglass feels, however, that only the can vendor market will rise this year and perhaps won't look as bleak as in previous years.

"Cans will probably go up to about 170,000 or 175,000- plus units," he estimates.

Another coin changer company experienced a good year, according to its marketing director. "In a marketplace where vending machine shipments are down, Mars Money Systems showed an increase over the previous year," says Art Karreff, marketing director. "We were pleased with our market share gains."

Subsequently, no major trends

Analysis of gross profit and sales statistics by product—1982, 1981, 1980

	Composition of sales at retail			Average sales per machine		
	1982	1981	1980	1982	1981	1980
Cigarettes	9.4%	11.4%	10.9%	$2,786	$2,800	$2,674
Candy, nuts, gum	7.1	7.9	7.3	3,104	2,975	2,713
Cold cup beverages	6.7	8.3	7.5	4,342	4,605	4,465
Hot cup beverages	8.6	10.6	10.2	3,788	4,093	4,034
Ice cream	.3	.3	.3	1,715	1,456	1,604
Milk	2.2	2.8	2.8	3,201	3,404	3,474
Sandwiches, salads, entrees	4.3	5.0	4.9	3,968	4,212	4,178
Pastry and snacks	6.8	8.0	7.0	3,441	3,417	3,228
Hot canned soups & food	.6	.9	1.1	1,457	1,693	1,849
Bottled and canned drinks	6.0	6.2	5.4	5,551	5,566	5,350
Misc. vending machine products	3.4	3.8	3.0	—	—	—
Total or averages for above	55.4%	65.2%	60.4%	$3,607	$3,688	$3,502
Sales other than through machines	44.6	34.8	39.6			
Total sales	100.0%	100.0%	100.0%			

Source: NAMA

Copyright: Beverage Industry

Profit analysis for 1982

(based on reported sales volume categories)

	Less Than $750,000	$750,000 to $1,999,999	$2,000,000 to $9,999,999	$10,000,000 or more
Sales at retail	100.0%	100.0%	100.0%	100.0%
Cost of sales	49.9	47.5	49.1	43.1
Total operating expenses	47.7	50.9	49.3	55.1
Operating Profit	2.4	1.6	1.6	1.8
Less interest expense	2.0	1.1	1.4	.3
Other income or charges (net)	1.7	1.7	1.0	1.6
Profit before income taxes	2.1%	2.2%	1.2%	3.1%

Source: NAMA

Copyright: Beverage Industry, September, 1983

Table 2. Quantity and value of shipments of coin-operated vending machines:
(Value in thousands of dollars)

Item	Number of companies	1982 Quantity	1982 Value	1981 Quantity	1981 Value
Coin-operated vending machines	45	465,374	318,982	492,385	338,313
Beverage vending machines	19	188,676	213,608	201,182	221,288
Hot beverage[1]:					
Nonoffice type	5	7,152	6,494	8,107	5,726
Office type	3				
Fresh brew, coffee, and combinations	4	6,186	13,860	9,359	17,464
Soft drink:					
Canned beverage (refrigerated) vending machines[2]	5	166,912	170,559	[b]170,483	[b]166,752
Bottle vending machines[3]	5				
Cup (postmix).	5	(D)	(D)	8,494	23,930
Package milk and juice (indoor)	3	1,387	2,982	[b]3,266	[b]5,954
Other vending machines for beverages[4]	4	(D)	(D)	1,493	1,462

[1]These are primarily coffee vending machines though they may also vend hot chocolate and/or hot soup from the same cabinet.
[2]Some vending machines designed and sold to handle canned beverages are also adaptable to bottled soft drinks through the use of a conversion kit.
(D) Data withheld to avoid disclosing figures for individual companies. [r]Revised by 5 percent or more from previously published figures.

Source: Dept. of Commerce, Bureau of the Census

Copyright: Beverage Industry, September, 1983

have been set, and most industry sources have said vending shipments will probably be stagnant for the next few years—no major growths or losses. As one major manufacturer put it, "Vending shipments will probably just follow along with the rest of the economy." □

Bulk soft drink sales make slight volume gain

While bulk soft drink sales continue to grow in volume, they have stopped displacing packaged sales as a total of the market.

The bulk segment of the soft drink market has been increasing over the last 15 years at a compound annual rate of 9.7%, but this growth has slowed over the last five years. The increase in bulk since 1976 has been at an 8% annual compound rate.

Why? Perhaps because of fast food restaurants, which have often been cited as the main reason for the inroads made in bulk sales over the last 20 years. For example, bulk sales were only 12% of the total market in 1965 and 22.4% of the market in 1981.

But it seems now the market is saturated with fast food restaurants and their popularity may have peaked. Thus while bulk sales continue to grow (about 3.7% in 1981), they are no longer doing so at the expense of packaged soft drinks.

The majors continue to hold onto the largest share of the bulk market, with Coke far in front of Pepsi.

That could begin to change,

Soft drink industry packaged and bulk sales

Year	Total sales (Mil 12 oz.)	Packaged sales (Mil 12 oz.)	Percent packaged (%)	Bulk sales (Mil 12 oz.)	Percent bulk (%)	Total wholesale value (Mil $)
1981	95,033	73,746	77.6	21,287	22.4	20,015
1980	91,598	71,080	77.6	20,518	22.4	17,677
1979	87,948	68,336	77.7	19,612	22.3	14,973
1978	83,760	65,752	78.5	18,008	21.5	13,345
1977	77,945	61,499	78.9	16,446	21.1	11,527
1976	70,859	56,333	79.5	14,526	20.5	10,375
1975	62,652	49,683	79.3	12,969	20.7	9,298
1974	60,768	48,007	79.0	12,761	21.0	7,827
1973	60,346	48,277	80.0	12,069	20.0	6,223
1972	56,663	45,614	80.5	11,049	19.5	5,684
1971	53,657	43,462	81.0	10,195	19.0	5,347
1970	49,546	40,479	81.7	9,067	18.3	4,900
1969	46,610	38,546	82.7	8,064	17.3	4,370
1968	44,433	37,546	84.5	6,887	15.5	4,166
1967	39,520	32,683	82.7	6,837	17.3	3,459
1966	37,641	32,371	86.0	5,270	14.0	3,176
1965	33,669	29,326	87.1	4,343	12.9	2,736

SOURCE: National Soft Drink Association Sales Survey, 1965-1981

Copyright: Beverage Industry, April 8, 1983

though, with the increasing acceptance of the bag-in-box system, an alternative to steel transfer tanks. This could bring more "mom and pop" syrup manufacturers into bulk sales, one industry source believes, because the initial cost is less.

The bag-in-box consists only of a metallized bag enclosed in a corrugated cardboard box that is easily stored until it's ready for use. Cost is about $1.65 for one, compared to a steel tank, which runs over $35.

This system works with the aid of a pump, either electric or air, that pulls the syrup out of the bag up to the dispenser. Bag-in-box has been used for about 20 years in the dairy industry, but it's new to the soft drink industry.

Problems in designing an efficient pump have held back its development in the soft drink industry. In addition, few of the systems have been approved by the majors.

But now it appears that many of the bugs have been worked out of the system. Approval by some of the major syrup manufacturers is reportedly eminent.

One industry source feels the bag-in-box system will certainly make big inroads in the market, but won't completely displace steel transfer tanks.

Where can the bag-in-box be especially applicable? At special events for which it would be impractical to buy a large number of tanks for a one-time event. Or in a situation where a bottler has long lines of distribution and doesn't own his own fleet.

On the other hand, transfer tanks aren't on the way out because they already represent a major investment for bottlers; they can't simply be discarded.

For this reason, an industry source estimates that steel transfer tank companies can expect at least level growth in sales in the future.

While the bag-in-box system is cheaper in the short run, it may not be in the long run. One source estimates it is actually more expensive. "There are some transfer tanks around that have been in service as many as 20 years. Even if you include maintenance costs, the steel tanks are still cheaper," the source said.

Here's a rundown on some of the bag-in-box manufacturers.

B-Bar-B, Inc., introduced the Syrup Pak at the 1981 NSDA convention in Los Angeles.

"It's a proven system," said Kenneth Hartung, director of marketing. Hartung said at the end of 1982, the system was in use in 600 to 700 locations.

"We're hoping the majors will approve it in '83. That will open a lot of doors for us," he said. It's already been approved by Sunkist and Lipton.

Hartung labels cost and convenience as the major advantages of the system. "We've talked to a lot of potential users and they feel they could realize a 25 to 45% savings by switching from steel transfer tanks to the bag-in-box system."

Grant Pedige, product manager for Liqui-Box Corp., located in Worthington, OH, said his company is "continually looking for new pump suppliers."

But he believes Shur-Flo offers the best pump on the market now. "We use that pump most of the time," he said. Liqui-Box has many applications outside of the soft drink industry now, but Pedigo expects major gains to come soon, and at the expense of steel transfer tanks.

Scholle's bag for bag-in-box systems has been approved by Coke because it met Coke's standards and was reported to offer the best taste.

Three companies are among the leaders in pump manufacturing for the system. They include Shur-Flo, Flo-Jet and McCann's.

Ernest Burnett, vp of Flo-Jet, said Coke, Pepsi and Seven-Up are testing their pump now. "There are a couple of people using it now," said Burnett, of the unit that was introduced to the market last year.

With efficient pumps coming on the market and approval of the bag-in-box by syrup manufacturers, it appears the bag-in-box is ready to explode on the market. While it probably won't completely displace the steel transfer tank, it should grab a sizeable share of the market. In the end, though, its effect on bulk sales will probably be minimal. □

$735 million powder market grows only 1.8% in 1982

Powdered beverage marketers are hoping that their new aspartame-sweetened, low-calorie products can put some growth back into the marketplace. Total gallonage was up only 1.8% in 1982, while dollar volume was down 4.5% to $735 million.

The decline in dollar volume was the result of shifts in consumer purchasing patterns away from presweetened beverages and towards unsweetened versions that have a lower retail pricetag.

In 1982, the two top-selling unsweetened powders—Kool Aid and Hawaiian Punch—sold a combined 561.2 million equivalent gallons of product. In 1981, the gallonage was 542.3. Presweetened versions of the same brands went from 181.6 million gallons to 167.8 million.

Only General Foods Kool Aid and Borden's Wyler brand, up 56.1% to 153.6 million gallons, had gains during the year. Kool-Aid unsweetened was up 5% to 546 million gallons. The presweetened version was up .2% to 143 million gallons.

New Crystal Light brand and Sugar Free Kool-Aid brand drink mixes are sweetened with aspartame and have four calories per 8-oz. serving.

Private label brands and "others" did show some gains, up 5.2% to 148.6 million gallons.

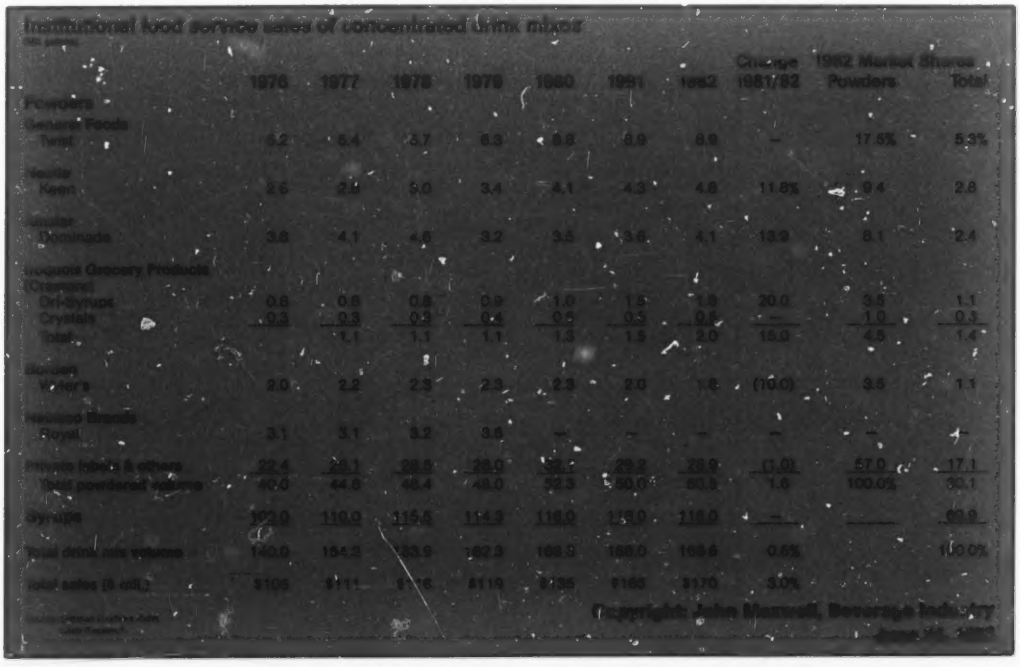
Hoping that use of aspartame will help open a new segment, three major marketers of powdered beverages have introduced new versions:

- General Foods has introduced sugar-free Kool-Aid and Crystal Light.
- Thomas J. Lipton Inc., has a new version of its Lipton Iced Tea mix.
- Borden was set to roll out its aspartame-sweetened version of Wyler's.

Borden reportedly planned to back its new product with a $20 million ad budget.

General Foods also budgeted $20 million to back its total Kool-Aid effort (includes unsweetened and both sugar- and aspartame-sweetened versions).

No numbers were available on



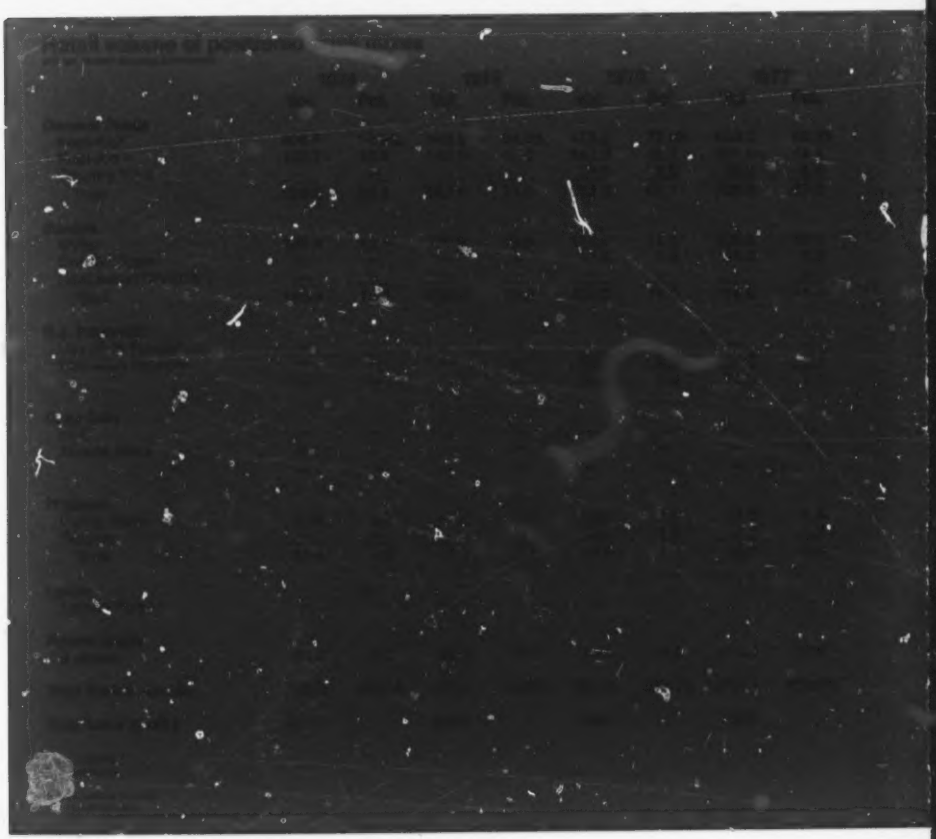
Institutional food service sales of concentrated drink mixes

	1976	1977	1978	1979	1980	1981	1982	Change 1981/82	1982 Market Shares Powders	1982 Market Shares Total
Powders										
General Foods										
Tang	6.2	6.4	7.7	8.3	8.8	8.9	8.9	–	17.5%	5.3%
Kraft										
Kool-Aid	2.6	2.9	3.0	3.4	4.1	4.3	4.8	11.6%	9.4	2.8
Borden										
Dominguez	3.8	4.1	4.6	3.2	3.5	3.6	4.1	13.9	8.1	2.4
Various Grocery Products (Organized)										
Dri-Syrups	0.6	0.6	0.8	0.9	1.0	1.5	1.8	20.0	3.6	1.1
Crystals	0.3	0.3	0.3	0.4	0.5	0.5	0.6	–	1.0	0.3
Total		1.1	1.1	1.1	1.5	1.5	2.0	15.0	4.5	1.4
Borden										
Wyler's	2.0	2.2	2.3	2.3	2.3	2.0	1.8	(10.0)	3.5	1.1
Various Brands										
Crystal	3.1	3.1	3.2	3.6	–	–	–	–	–	–
Private labels & others	22.4	24.1	26.5	28.0	28.3	29.2	28.9	(1.0)	57.0	17.1
Total powdered volume	40.0	44.8	48.4	48.0	52.3	50.0	50.9	1.8	100.0%	30.1
Syrups	103.0	110.0	115.6	114.3	118.0	118.0	118.0	–		69.9
Total drink mix volume	143.0	154.8	163.9	162.3	169.0	168.0	168.9	0.6%		100.0%
Total sales ($ mil.)	$109	$111	$116	$119	$135	$160	$170	5.0%		

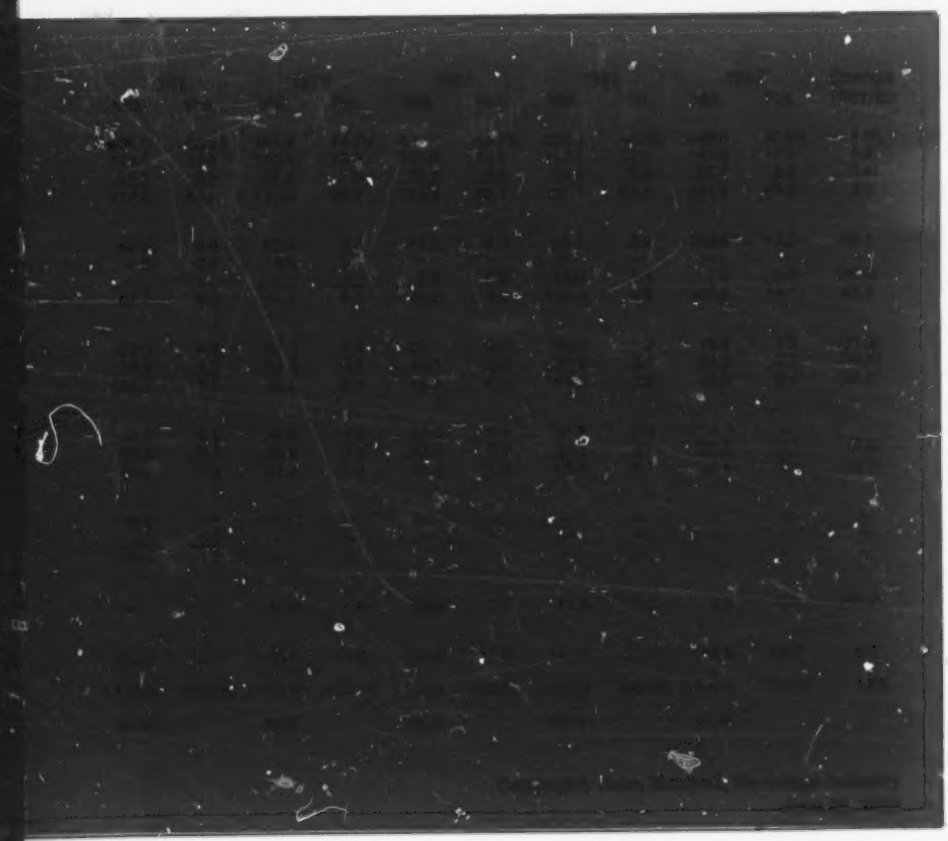
Copyright, John Maxwell, Beverage Industry

Crystal Light, which was rolled out initially in 23 markets. Positioned as an adult "soft drink," introductory commercials focused on fitness and tied in with local fitness centers.

Retail volume of instant breakfast drinks was down in 1982,



17.2% to 72.7 million gallons with an estimated dollar volume of $120 million. Total powder sales to institutes was up slightly 1.6% to 50.8 million gallons. Sales of drink syrups to these outlets was up 0.5% in gallons, 3% in dollar volume. □



Liquor industry declines for third straight year

For the third straight year, the distilled spirits industry is down in the United States.

A report by John C. Maxwell Jr. of Lehman Brothers Kuhn Loeb Research estimates the industry decreased 2% over the previous year.

Maxwell said while much of the volume drop can be attributed to the recession, lifestyles are also moving away from alcohol to soft drinks and other lighter products.

In addition, new laws dealing with alcohol consumption are not helping the industry. In some states, drunk driving laws have grown tougher and/or the drinking age has risen.

Maxwell added that states looking to close budget deficits may find liquor a convenient "whipping boy" by passing excise taxes.

"Thus, we believe the industry will remain under pressure from these sources over the coming months and years, and we do not see much hope for industry growth," Maxwell said.

There were a few bright spots, however. Brown-Forman Distillers and National Distillers had nearly all their major brands show some growth during the year. National even had some brands growing in the double-digit area, the report said.

Maxwell also pointed out that the premium brands continue to sell well as do the brands at the low end of the market.

"That's due to the economy. The rich get richer and the poor get poorer," he said.

Specialty items, like Kahlua and Bailey's Irish Creme, continue their growth. "That's indicative of a change in lifestyle," he said.

Of the top five brands in the industry, only one has changed. Brown-Forman's Jack Daniels moved into the fourth spot, displacing Seagram's V.O., which was pushed to seventh place. Bacardi remains first, Smirnoff second, Seven Crown third and Jim Beam fifth. □

Apparent Consumption of Distilled Spirits by Class and Type (Million Mixed Cases)

	1981	1982	Change
Blended	13.98	13.10	(6.3)
100% Light	0.22	0.18	(18.2)
Total Domestic Whiskey	36.92	35.38	(4.2)
Bond	0.90	0.81	(10.0)%
Straight	21.82	21.29	(2.4)
Total Bourbon	22.72	22.10	(2.7)
U.S.-Bottled Canadian	12.85	13.10	1.9
Foreign-Bottled Canadian	8.23	7.90	(4.0)
Total Canadian	21.08	21.00	(0.4)
U.S.-Bottled Scotch	8.16	7.90	(1.9)
Foreign-Bottled Scotch	12.30	11.30	(8.1)
Total Scotch	20.46	19.20	(5.7)
Irish	0.29	0.30	3.4
Total Imported Whiskey	41.83	40.50	(3.2)
Total All Whiskey	78.75	75.88	(3.6)
Vodka	31.55	31.30	(0.8)
Gin	15.41	15.10	(2.0)
Liqueurs/Cordials	13.76	14.10	2.5
Rum	11.74	11.50	(2.0)
Brandy	6.86	7.10	3.5
Tequila	2.89	3.00	3.8
Prepared Cocktails	3.40	3.12	(8.2)
Total Nonwhiskey	85.61	85.22	(0.5)
Grand Total Distilled Spirits	164.36	161.10	(2.0)

Source: Lehman Brothers Kuhn Loeb Research

Copyright: John C. Maxwell and Beverage Industry May 6, 1983

Top 40 brands

Rank 1981	Rank 1982	Brand	Company	9-Liter Cases (000) 1981	1982E	Change
1	1	Bacardi	Bacardi	8,220	8,461	2.9
2	2	Smirnoff	Heublein	7,330	7,267	(0.9)
3	3	7 Crown	Seagram	6,245	5,700	(8.7)
6	4	Jack Daniel's	Brown-Forman	3,774	3,936	4.3
5	5	Jim Beam	James Beam (AB)	3,790	3,910	3.2
8	6	Windsor Supreme	National	3,514	3,865	10.0
4	7	V.O.	Seagram	4,000	3,740	(7.5)
10	8	Canadian Mist	Brown-Forman	3,296	3,689	11.9
7	9	Canadian Club	Walker (GWL)	3,715	3,440	(8.0)
11	10	Seagram's Gin	Seagram	3,217	3,184	(1.0)
9	11	Popov	Heublein	3,395	3,077	(9.4)
12	12	Gordon's Gin	Gordon/Renfield	3,154	3,000	(4.9)
13	13	J&B Rare	Paddington (PC)	2,965	2,850	(3.9)
14	14	Gilbey's Gin	National	2,706	2,700	(0.2)
19	15	Kamchatka	National	2,019	2,322	15.0
15	16	Dewar's	Schenley (RA)	2,470	2,300	(7.3)
19	17	Gilbey's Vodka	National	2,019	2,221	10.0
17	18	Gordon's Vodka	Gordon/Renfield	2,132	2,140	0.4
16	19	Cutty Sark	Buckingham	2,145	2,018	(5.9)
18	20	Black Velvet	Heublein	2,054	1,979	(3.7)
23	21	Early Times	Brown-Forman	1,875	1,970	5.1
25	22	Walker Brandy	Walker (GWL)	1,703	1,766	3.7
20	23	Ten High	Walker (GWL)	1,956	1,760	(10.0)
22	24	Beefeater	Kobrand	1,900	1,755	(7.6)
21	25	Christian Brothers	Fromm & Sichel	1,924	1,725	(10.3)
20	26	Ancient Age	Schenley (RA)	1,956	1,675	(14.4)
27	27	Kahlua	Walker (GWL)	1,550	1,600	3.2
24	27	Kessler	Calvert (S)	1,766	1,600	(9.4)
26	28	Johnnie Walker Red	Somerset (NS)	1,585	1,506	(5.0)
30	29	Old Crow	National	1,287	1,441	12.0
29	30	Southern Comfort	Brown-Forman	1,304	1,312	0.6
28	31	Calvert Extra	Calvert (S)	1,388	1,300	(6.3)
32	32	Old Grand-Dad	National	1,255	1,250	(0.4)
35	33	Old Smuggler	G&W Sales (GWL)	1,098	1,208	10.0
31	34	Wolfschmidt	Seagram	1,262	1,135	(10.1)
34	35	Tanqueray	Somerset (NS)	1,110	1,110	—
36	36	Crown Royal	Seagram (S)	1,025	1,100	7.3
33	37	Chivas Regal	General Wine (S)	1,199	1,075	(10.3)
31	38	Imperial	Walker (GWL)	1,262	1,073	(15.0)
37	39	Castillo Rum	Bacardi	1,019	1,025	0.6
—	40	Bailey's Irish Cream	Paddington (PC)	789	1,000	26.7

Key to parent corporations:
(AB) American Brands
(G) Glenmore
(GWL) Gooderham & Worts Ltd.
(NS) Norton Simon
(PC) Paddington/Carillon
(RA) Rapid-American
(S) Seagram

Source: Lehman Brothers Kuhn Loeb Research

Copyright: John C. Maxwell and Beverage Industry May 6, 1983